

COUNTY BOROUGH OF BRIGHTON.



**Annual Report**  
OF THE  
MEDICAL OFFICER OF HEALTH  
AND  
SCHOOL MEDICAL OFFICER  
*FOR THE YEAR 1908.*

---

DUNCAN FORBES, M.D., B.Sc., D.P.H.

---

BRIGHTON :  
KING, THORNE & STACE, JUBILEE STREET.

1909.

# COUNTY BOROUGH OF BRIGHTON.



## Sanitary Committee :

THE MAYOR (MR. ALDERMAN J. P. SLINGSBY ROBERTS).

MR. ALDERMAN	BLAKER.	MR. COUNCILLOR	LINTOTT (Chairman).
„	COUNCILLOR BURBERRY.	„	„ SONE.
„	„ GEEKE.	„	„ TEASDALE.
„	„ HARDY.	„	„ TITCOMB.
„	„ HEITZMAN.	„	„ WELLMAN.
„	„ HEUN.	„	„ YATES.

Town Clerk : HUGO TALBOT, Esq.



## Staff of the Public Health Department :

### INSPECTORS.

JOHN NORRISH (Certif. San. Institute), Assistant Inspector of Nuisances.

JAMES A. CUCKNEY „ „ „ „ „  
(Superintendent of Abattoir).

ERNEST E. MILLS (Certif. San. Institute), „ „ „  
(Inspector under the Factory and Workshops Act and Shop Hours Act).

FREDERICK BRAYBON (Certif. San. Institute), Assistant Inspector of Nuisances.

ARTHUR WARD „ „ „ „ „

JOSEPH WEBB „ „ „ „ „

FREDERICK SALVAGE „ „ „ „ „

JOHN SHARP.

ALFRED WELLSTED „ „ „ „ „

JOHN BAKER, Disinfector.

HERBERT W. HEASMAN, Senior Clerk.

CHARLES GREENFIELD, Junior Clerk.

HENRY NEWMAN, Shorthand Clerk.

A. EDGE, Qualified Dispenser at Sanatorium.

Matron of Sanatorium : Miss RATCLIFF.

House Physician and Deputy to Medical Officer of Health :

R. M. COURTAULD, M.A., M.B., B.C., D.P.H.

Chief Inspector of Nuisances :

JAMES F. SKINNER (Certif. San. Institute).

Public Analyst : MEREDITH WYNTER BLYTH, B.Sc., F.I.C.

### School Medical Staff:

NURSE PAYNE. NURSE HENSON. Miss CAMPBELL.

School Doctor : J. LAMBERT, M.D., B.A., D.P.H.

Medical Officer of Health and School Medical Officer :

DUNCAN FORBES, M.D., B.Sc., D.P.H.

# PREFACE.

---

TOWN HALL, BRIGHTON,

*April 16th, 1909.*

*To the Sanitary Committee of the Brighton Town Council.*

GENTLEMEN,—

I beg to present herewith my Report on the work of the past year. 1908 is the first year in which the medical inspection of school children has been required by the Board of Education. The duties of the School Medical Officer, apart from the routine medical inspection, are also the duties of the Medical Officer of Health. On the advice of my predecessor the posts were combined. As it was impossible, however, for the Medical Officer of Health to undertake the routine work, Dr. Lambert was appointed School Doctor to act under my supervision. In accordance with the wish expressed in a memorandum issued by the Local Government Board, the Annual Report regarding the Medical Inspection of School Children is issued together with the Annual Report regarding the Health of the District.

In preparation of the Annual Report proper I have been assisted by Dr. Courtauld, Chief Inspector Skinner, Inspectors Norrish, Cuckney, Mills and Ward. The School Report has been written conjointly with Dr. Lambert; owing to this being the first occasion on which it has been published many details regarding routine have been recorded which will be unnecessary in future reports.

In December the Chairman of the Sanitary Committee, Mr. Councillor Lintott, delivered an address concerning the health of Brighton. This paper was of great interest, and from a sanitary point of view was so important that it was considered advisable to include it as an Appendix in the present Report.

At the end of this, my first year of office, I wish to acknowledge the constant and assiduous help which I have received from the members of the Sanitary Staff, of the School Medical Staff, and from the Matron and Staff at the Sanatorium. I have also to thank the members of the Sanitary Committee and the Elementary Schools Sub-Committee for the time and attention which they have devoted to the important work of my Department.

I am, Gentlemen,

Yours obediently,

DUNCAN FORBES,

*Medical Officer of Health and  
School Medical Officer.*



## TABLE OF CONTENTS.

	PAGE
Population ... ..	5
Births ... ..	5
Deaths ... ..	5
Deaths in Public Institutions ...	6
Deaths of Visitors ... ..	6
Infantile Mortality ... ..	6
Still Births ... ..	7
Notification of Infectious Disease	7
Scarlet Fever ... ..	8
Diphtheria ... ..	8
Whooping Cough ... ..	10
Measles ... ..	10
Enteric Fever ... ..	11
Diarrhoea ... ..	12
Puerperal Fever ... ..	13
Cancer ... ..	16
Tuberculous Diseases ... ..	16
Notification of Phthisis ... ..	17
Borough Isolation Hospitals	20-28
Municipal Laboratory ... ..	29
Sanitary Work of the Year ... ..	31
Housing ... ..	34
Fish Market ... ..	34
Slaughter Houses ... ..	35
Food Condemned ... ..	35-37
Sale of Food and Drugs Act ..	37
Public Analyst's Report ... ..	38
Factories and Workshops ... ..	40
Statistical Tables ... ..	46-55
<b>Medical Inspection of School</b>	
<b>Children</b> ... ..	57
School Population ... ..	59
School Nurses ... ..	60, 93
Medical Inspection ... ..	61
Vision Testing ... ..	62
Schedule ... ..	63, 64

	PAGE
Parents ... ..	66
Visits to Schools ... ..	67
Number Inspected ... ..	68
Special Examinations ... ..	69
Chief Defects, Summary of ... ..	70
Mental Capacity ... ..	71, 97
Speech .. ...	71
Measurements ... ..	72
Cleanliness ... ..	75
Exclusion from School ... ..	77
Nutrition ... ..	78
Diseases of Nose and Throat ... ..	78
Glands ... ..	80
Teeth ... ..	81
Ear Diseases ... ..	81
Eye Defects and Vision ... ..	82
Heart and Lung Diseases ... ..	85
Diseases of Nervous System ... ..	86
Diseases of Skin ... ..	87
Tuberculosis ... ..	88
Vaccination ... ..	88
Treatment ... ..	89
School Clinic ... ..	93
Infectious Diseases ... ..	96
Provision of Meals ... ..	99
Physical Exercises ... ..	101
Dr. Eve's Report ... ..	102
Employment of Children Act ... ..	103
Cruelty to Children Act ... ..	103
<b>How Brighton is Kept Healthy</b>	107
House Refuse... ..	112
Public Abattoir ... ..	113
Water Supply ... ..	113
Open Spaces ... ..	114
Housing of Working Classes ... ..	117
Borough Sanatorium ... ..	121



## VITAL STATISTICS.

### POPULATION.

The estimated population of the County Borough at the middle of 1908 was 129,967.

The Borough Surveyor reports that 142 new dwelling-houses were passed by the Town Council during 1908, as compared with 109 in 1907, and 305 in 1906. These were situate in the following Wards: Preston 47, Preston Park 38, Lewes Road 18, Kemp Town 1, Queen's Park 20, Montpelier 7, Pavilion 2, St. Nicholas 3, Hanover 3, Pier 3.

### BIRTHS.

The total number of births registered in the Borough in the 53 weeks ending January 2nd, 1909, was 2,809, 1,489 of boys and 1,320 of girls. This is equivalent to a birth-rate of 21·2 per 1,000 inhabitants. The average birth-rate of the seventy-six great English towns was 26·9.

Of the births, 182 were of illegitimate children, forming 6·5 per cent. of the total births. Of 57 births occurring in the Workhouse, 39 were of illegitimate children.

### DEATHS.

Last year, 1,951 deaths from all causes were registered as belonging to Brighton, including 52 in the Borough Asylum at Haywards Heath and 17 in the Shoreham Workhouse, which is equivalent to a death-rate of 14·7\* per 1,000. The death-rate of the seventy-six great towns was 14·9; in England and Wales as a whole, 14·7.

A comparison with Brighton in former years is given in Table I., page 46. In Table II., the deaths, and the most important causes of death, are given for each Ward.

The progress of the Brighton death-rate for a series of years is indicated in the following tabular statement:—

Death-rate per 1,000 population from all causes.			
Ten years	1851-60	...	25·0
	1861-70	...	25·6
	1871-80	...	20·5 (Preston incorporated in 1874)
	1881-90	...	18·5
	1891-1900	...	17·6
	1901-05	...	15·3
	1906	...	14·8
	1907	...	14·7
	1908	...	14·7

---

\* See foot-note, page 46.

## DEATHS IN PUBLIC INSTITUTIONS—DEATHS OF VISITORS.

The Registrar-General, in his returns for Brighton, which are tabulated on a uniform basis in order to make them comparable with those for other towns, includes the deaths of visitors in private houses, but excludes the deaths of non-residents in the public institutions enumerated below.

The following Table shows the returns for 1908 :—

	Residents.	Non-residents.	Total.
Workhouse... ..	279	4	283
Sussex County Hospital...	111	46	157
Royal Alexandra Hospital	34	16	50
Women's Hospital ...	4	2	6
Throat and Ear Hospital	—	3	3
Home for Incurable Children	1	4	5
Sanatorium... ..	22	—	22
	451	75	526

The number of Brighton residents dying in public institutions outside the Borough was 52 in the Haywards Heath Asylum, 17 in the Shoreham Workhouse, and 1 in the Portslade Industrial School.

## DEATHS OF VISITORS.

The number of deaths of visitors in private houses was 77 ( $\cdot 6$  per 1,000).

Of the 46 non-residents whose deaths occurred in the County Hospital, 34 came from rural districts of Sussex, &c., 9 from Hove, and 1 each from Halifax, Oxford and Eltham.

Of the 16 non-residents dying in the Royal Alexandra Hospital, 4 came from Hove, 10 from Sussex, and 1 each from London and Kent.

The net death-rate given in Table I., page 46, is 14·73 per 1,000. This allows for the 71 deaths of Brightonians in public institutions outside the Borough (Asylum and Shoreham Workhouse), and excludes the 71 deaths of visitors occurring in the public institutions of Brighton.

## INFANTILE MORTALITY.

The deaths of infants under one year were 104 per 1,000 births, as compared with an average of 137 in the ten years 1898-1907. The returns under this heading are becoming more satisfactory.

Of the total 293 deaths under one year, 37 were of illegitimate babies. Stated in terms of births, this implies that the infantile mortality among illegitimate babies is 202 as compared with 97 per 1,000 among babies born in wedlock. The chief causes of infant mortality are given in Table III., page 48.

Indirectly, much work has been done from the Public Health Department, as well as by local voluntary agencies, to bring about the reduction in the infant mortality figure, shewn in Table I.



The following institutions have obtained gratis, from the Public Health Department, leaflets of advice on the management and feeding of infants, and have distributed them in the routine course of their work:—Sussex County Hospital, Lying-In Institution, Royal Alexandra Hospital, and various mothers' meetings.

The Registrars of Births, and the midwives, also gave similar leaflets to patients.

Cards relating to the prevention of summer diarrhœa, to the number of about 10,000, are distributed every summer by the Sanitary Department, mainly in the poorer streets of the town.

#### CHIEF CAUSES OF DEATH.

The chief causes of death, and the number of deaths from each disease or group of diseases, are tabulated in Table IV., page 49. This table gives the relative incidence of different diseases, and the incidence of each disease in the two sexes and at different ages. In one case the cause of death was not medically certified.

#### STILL BIRTHS.

Owing to the courtesy of the Secretaries of the three Cemeteries, I am enabled to give a record of the number of still-births and by whom they were certified before burial.

Certified by	Brighton and Preston Cemetery.	Parochial Cemetery.	Extra Mural Cemetery.	TOTAL.
Doctors ...	38	15	47	60
Midwives ...	12	2	...	14
Coroner ...	1	1	...	2
	51	18	47	76

#### NOTIFICATION OF INFECTIOUS DISEASES.

On March 1st, 1891, the Infectious Diseases (Notification) Act was adopted in Brighton.

The returns furnished to me under this Act shew that the number of cases of infectious diseases notified during 1908 was:—Diphtheria, 211; membranous croup, 1; scarlet fever, 287; enteric fever, 28; erysipelas, 83; puerperal fever, 12; small pox, 0.

One case of diphtheria, 3 of puerperal septicæmia, and 1 of erysipelas were notified severally by two doctors.

The cases notified are classified according to age and ward in Table page .

The total number of notifications (including 20 notified by the medical officer of health) was 626 as compared with 614 in 1907. Of the total, 144 occurred in public medical practice, while 460 occurred in private medical practice.



## SCARLET FEVER.

The incidence of scarlet fever since notification came into operation is shewn in the following table:—

					Per 100,000 of population.		Number of deaths per 100 cases notified.
					Number of cases.	Number of deaths.	
1892	...	...	...	...	320	7	2·1
1893	...	...	...	...	408	9	2·2
1894	...	...	...	...	185	3	1·6
1895	...	...	...	...	164	4	2·5
1896	...	...	...	...	206	5	2·3
1897	...	...	...	...	270	10	3·7
1898	...	...	...	...	305	6	2·0
1899	...	...	...	...	667	8	1·2
1900	...	...	...	...	474	10	2·1
1901	...	...	...	...	142	1	0·6
1902	...	...	...	...	117	2·4	2·1
1903	...	...	...	...	155	—	—
1904	...	...	...	...	136	1·6	1·1
1905	...	...	...	...	165	0·8	0·5
1906	...	...	...	...	172	1·6	0·9
1907	...	...	...	...	177	0	0
1908	...	...	...	...	221	1·5	0·9

Two deaths from scarlet fever occurred in 1908, as compared with none in 1907. Of the total 287 notified cases, 249, or 86·8 per cent., were treated in the Sanatorium, as compared with 85·6 per cent. in 1907. Of the total cases, one case occurred in each of 165 private houses; in each of 35 houses, two cases occurred; in each of eight houses, three cases occurred; in two houses, four cases; and in one convalescent home, two cases. At the Workhouse one case occurred, a casual; and in other institutions 9, 4, 2 and 2 cases occurred respectively. For other particulars regarding scarlet fever see Sanatorium Report.

## DIPHTHERIA.

The incidence of diphtheria in Brighton, since notification came into operation, is shewn in the following table:—

					Number of cases per 100,000 of population.	Number of deaths per 100,000 of population.	Case-mortality. Number of deaths per 100 cases notified.
1892	...	...	...	...	93	20	20·2
1893	...	...	...	...	157	30	18·4
1894	...	...	...	...	109	22	21·1
1895	...	...	...	...	172	16	8·8
1896	...	...	...	...	142	17	10·9
1897	...	...	...	...	154	10	6·5
1898	...	...	...	...	313	18	5·8
1899	...	...	...	...	547	51	9·2
1900	...	...	...	...	554	58	10·2
1901	...	...	...	...	567	52	9·1
1902	...	...	...	...	349	29	8·3
1903	...	...	...	...	326	26	7·8
1904	...	...	...	...	213	13	6·0
1905	...	...	...	...	174	4	2·2
1906	...	...	...	...	179	10	5·6
1907	...	...	...	...	205	11	5·3
1908	...	...	...	...	162	7	4·3]

Case 69 was the only "return case" last year. In the years 1901 to 1907, there were 4, 2, 4, 3, 1, 1 and 0 "return cases" respectively.

*Multiple Cases in Houses.*—Of the total 211 cases notified, there was one case each in 162 private houses, two cases each in ten houses, three cases each in five houses, and eleven cases in a convalescent home, and two and one in two public institutions.

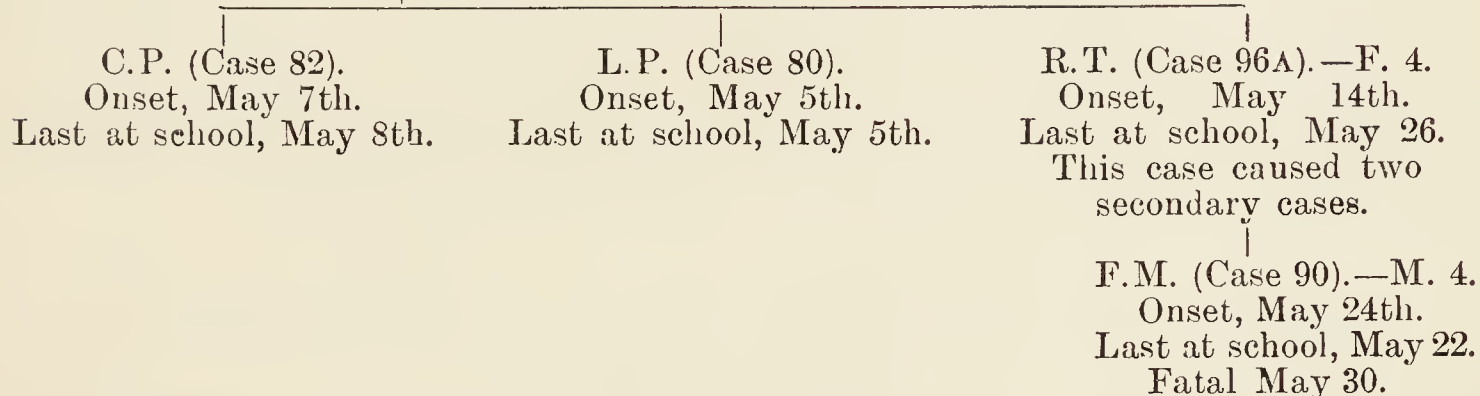
*School Infection.*—Below is given a short account of two outbreaks of diphtheria in the Infant Department of two schools:—

I.—Cases in Babies' Class of.....School.

A.P. (Case 83).—M. 4.

Onset, May 3rd.

Last at school, May 8th.



On May 29th, 49 children of the Babies' Class were swabbed, and a *nasal swab* from a male aged 5 was found positive. The only sign was a sore nose. The Babies Class was closed from May 29th to June 15th. During the closure further cases occurred in two houses amongst children attending this class.

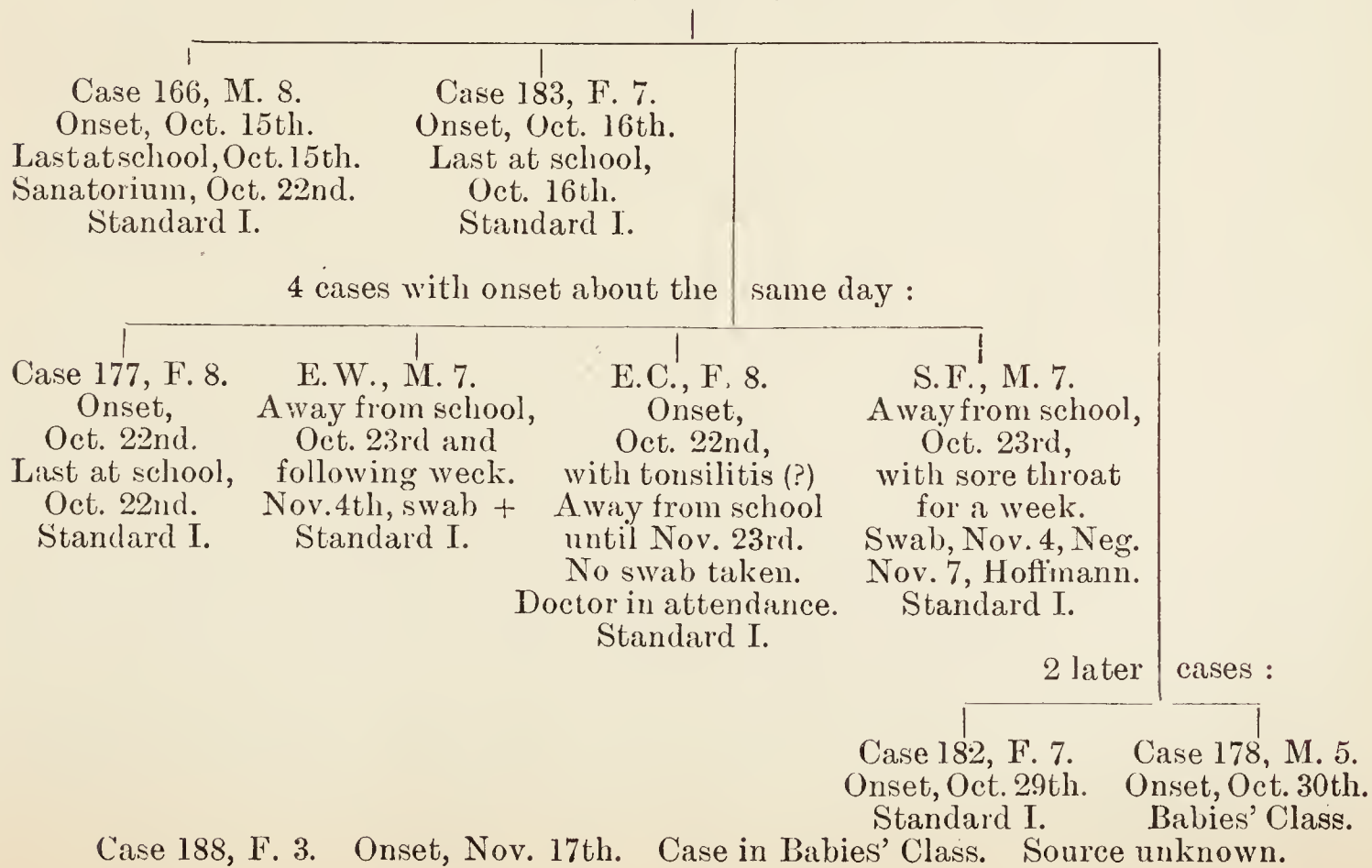
No further cases occurred in this school during 1908.

II.—Eight cases of illness in Standard I. (of.....Infant School) and two cases in Babies' Class. Six of those cases were identified as diphtheria. Of the unnotified cases, one gave a positive swab, one gave Hoffmann's bacilli, one was negative, and from one no swab was taken.

L.O., F. 8.

Away from school Oct. 13th to Oct. 19th,  
on which day she returned and remained at  
School until excluded on Nov. 9th.

Standard I.





The reasons for supposing that L.O. had diphtheria are that her cousin, C.O., M. 6, is reported by his doctor as having suffered from acute pharyngitis from September 21st to November 2nd, and that his brother, A.O., M. 3, Case 181, began with diphtheria on October 31st. L.O. visited C.O.'s house frequently during C.O.'s illness and played with her. L.O.'s illness was described as an influenza cold, but she was not attended by a doctor. It is practically certain that both C.O. and L.O. had diphtheria, although their swabs were both negative, on November 9th.

### WHOOPIING COUGH.

As shewn in the following table, the death-rate from whooping cough was higher than in 1906.

The 76 cases notified, chiefly from schools, during 1908, occurred in 43 houses. Of these cases 12 occurred under one year of age, 6 aged 1-2, 9 aged 2-3, 15 aged 3-4, 6 aged 4-5, 17 aged 5-6, 11 aged 6-7.

#### *Annual Death-rate per 100,000 inhabitants from Measles and Whooping Cough.*

Year.	Measles.	Whooping Cough.	Year.	Measles.	Whooping Cough.
1882	143	115	1895	20	34
1883	51	57	1896	46	27
1884	7	33	1897	14	21
1885	31	41	1898	67	13
1886	10	60	1899	1	16
1887	64	28	1900	43	28
1888	3	43	1901	10	21
1889	40	24	1902	24	23
1890	53	89	1903	4	12
1891	24	18	1904	71	28
1892	100	19	1905	2	9
1893	12	47	1906	22	17
1894	30	12	1907	10	24
			1908	16	13

### MEASLES.

The death-rate from this disease, compared with past years, is shewn in the above table.

The 711 cases notified, chiefly from schools, during 1908, occurred in 411 houses. Of these cases 24 occurred under one year of age, 51 aged 1-2, 61 aged 2-3, 87 aged 3-4, 122 aged 4-5, 146 aged 5-6, 124 aged 6-7, 57 aged 7-8, 14 aged 8-9, 11 aged 9-10, and 14 aged over 10 years.

On account of the prevalence of measles, St. Bartholomew's Infants School and Loder Road Infants' School were closed from April 7th and April 13th respectively, until after the Easter holidays (April 27th) (Easter holiday, April 16th to April 27th).

St. John the Baptist's Infants' School was closed from May 27th to June 15th, because of measles and whooping cough (Whitsun holiday, June 5th to June 15th).



## ENTERIC OR TYPHOID FEVER.

The incidence of enteric fever, since notification came into operation, is shewn in the following table:—

						Number of notified cases per 100,000 of population.	Number of deaths per 100,000 of population.	Case-mortality  Number of deaths per 100 cases notified.
1892	...	...	...	...	...	54	7	12·7
1893	...	...	...	...	...	65	13	19·5
1894	...	...	...	...	...	69	9	13·0
1895	...	...	...	...	...	72	12	16·6
1896	...	...	...	...	...	101	12	11·2
1897	...	...	...	...	...	94	17	18·1
1898	...	...	...	...	...	105	15	14·3
1899	...	...	...	...	...	148	20	13·7
1900	...	...	...	...	...	67	10	14·4
1901	...	...	...	...	...	37	5	13·0
1902	...	...	...	...	...	52	11	21·5
1903	...	...	...	...	...	31	3	10·3
1904	...	...	...	...	...	27	5·5	20·6
1905	...	...	...	...	...	27	1·6	5·9
1906	...	...	...	...	...	17	2·3	13·6
1907	...	...	...	...	...	19	2·3	12·5
1908	...	...	...	...	...	22	3·9	17·2

Of the 28 total cases, five were imported, *i.e.*, due to infection derived before the patient came to live in Brighton. Two cases followed the eating of mussels, five the eating of oysters within the limits of the incubation period of this disease.

Case 4 subsequently proved to be Puerperal Fever. Case 7, onset May 4th, 1908, patient was the husband of a case discharged from the Sanatorium in March, 1907, after a long illness with three relapses. Case 21 was infected indirectly from Case 17, the carrier case not being notified. Case 2 was a nurse infected by an enteric patient. Cases 6, 10, 12 and 24 were probably not typhoid fever. Case 18 was a man who worked in the sewers. Seven cases had no traceable source of infection.

*The following brief histories are given of the cases where the possibility of mussel and of oyster infection was present.*

*Oysters—*

*Case 8.* P.G. F., 28, partook of an oyster supper with her father and mother on May 2nd. The oysters were bought on May 1st. On May 2nd the mother complained of pains in the stomach, and on May 3rd took some pills. P.G. sickened with Typhoid Fever on May 11th. The oysters were obtained directly from Dealer A.

*Case 15.* E.Z. F. 40, had been in the habit of having, along with her husband, once weekly, an oyster supper at Dealer A.'s oyster bar.

*Case 20.* S.Q. M. 29, a fishmonger, bought 25 oysters from the Fish Market about 14 days before onset with Enteric Fever. S.Q. and his brother opened the oysters, which they and their wives and the three children of S.Q. at once proceeded to eat. None of the others had any illness.

*Case 22.* R.O. M. 30, a keeper of a beer shop, on October 15th, brought to his home five oysters which he bought at a shop, the proprietor of which stated that he got his oysters from Dealer A. and occasionally from — Emsworth. R.O. and his wife ate the oysters. The wife vomited during the night of the 15th, and next morning took some pills. Mrs. R.O. stated that the oysters “tasted badly.” R.O. sickened on the 27th.

*Case 23.* G.V. M. 22, had been “out of sorts” for some time, and for that reason had oysters on Oct. 28th and Nov. 8th, 11th and 19th. He fell ill on Nov. 19th. The oysters were obtained from Havant.

#### *Mussels—*

*Case 27.* Z.A. F. 29, bought a quart of mussels from an unknown street hawker on Nov. 20th. The mussels are said to have been cooked by Z.A., and eaten by her and her child aged 7. This child suffered from a swollen face on the next day. Z.A. began with Enteric Fever on Dec. 3rd.

*Case 28.* F.I. M. 34, a house painter, brought home some mussels on Nov. 1st. His son, aged 6, ate one, and thereafter vomited. F.I. ate the others. F.I. sickened for Typhoid Fever in the middle of November, but remained at work for some time.

*Cases 27 and 28 proved fatal.*

### DIARRHŒA.

During 1908, 31 deaths were returned under headings which are officially classed as diarrhœa. Of these deaths, 23 occurred in infants under 1 year of age, and 4 in children aged 1-2 years. Under the heading enteritis, 15 deaths were registered, of which 13 occurred under 1 year of age, and 0 at ages 1-2.

In the following Table the deaths in children under 1 year old from diarrhœa are given in terms of the births.

	From Diarrhœa.		From Diarrhœa.	From Diarrhœa and Enteritis.
	Deaths per 1,000 Births.		Deaths per 1,000 Births.	Deaths per 1,000 Births.
1897	25·5	1903	14·1	20·6
1898	32·9	1904	14·5	22·3
1899	49·4	1905	11·3	17·6
1900	24·0	1906	17·2	23·5
1901	23·5	1907	12·2	21·4
1902	11·7	1908	8·2	12·8

In the following Table the diarrhœal death-rate is stated per 1,000 of total population, and is compared with that of London, &c.

Death-rate from Diarrhœa per 1,000 of population.	1903	1904	1905	1906	1907	1908
Brighton .. .. .	·40	·43	·37	·54	·33	·24
London ... .. .	·64	1·04	·73	·95	·32	·54
76 great towns ... ..	·71	1·20	·83	1·16	·39	·67



The climatic conditions of the summer of 1908 were favourable to a low diarrhœal rate.

Great importance attaches to the methods of infantile feeding as bearing on the prevention of diarrhœa. For the last six years it has been ascertained in house-to-house visiting how the babies of the working-classes are fed; and the first half of the following table gives this information concerning 2,430 babies.

	A.—Method of feeding of 2430 infants found in house-to-house inspection of houses of the working classes in the 6 years, 1903-08.					B.—Infants who died from Epidemic Diarrhœa in the 6 years, 1903-08.				
	Age of Infants in months.					Age of Infants in Months.				
	0-3	3-6	6-9	9-12	Total.	0-3	3-6	6-9	9-12	Total.
I.—Suckled only ... ..	475	500	409	172	1556	6	3	2	1	12
Ditto and farinaceous food ... ..	18	42	62	113	235	1	2	1	2	6
Ditto and cow's milk ...	9	12	14	7	42	1	1	1	1	4
Ditto and condensed milk ... ..	3	15	7	2	27	1	—	1	—	2
II.—Cow's milk only ... ..	27	72	67	37	203	16	41	10	7	74
Ditto and farinaceous food ... ..	9	45	59	54	167	1	3	10	14	28
III.—Condensed milk only ...	13	32	27	23	95	8	28	18	8	62
Ditto and farinaceous food ... ..	3	8	23	22	56	—	4	2	4	10
IV.—Farinaceous food, including patent food only mentioned, or same food as parents ... ..	5	6	3	23	37	3	1	1	—	5
V.—Unknown ... ..	—	2	4	6	12	6	8	3	5	22
Total ... ..	562	734	675	459	2430	43	91	49	42	225

In previous reports the dangers attending the injudicious feeding of children have been fully discussed.

### PUERPERAL FEVER, &c.

During the year, the midwives in private practice were interviewed at the Public Health Office.

Of the 30 supposed to be in private practice, 6 were not acting as midwives. Of the remaining 24—6 were illiterate; 6 did not keep their registers properly; 11 had bags without washable linings; all, excepting two, had washable dresses; 4 kept regular records of pulse and temperature; 5 kept records if either pulse or temperature were found abnormal. A majority used the same syringe for syringing and giving enemata; 4 carried douche cans.

An improvement has resulted from the inspection mentioned, but for the proper administration of the Midwives Act, a superintendent of midwives, acting under the direction of the Medical Officer of Health, should be appointed.

The table given below records the more important points regarding the notified cases of puerperal fever.



No. of Case.	Age.	Midwife at Labour.	Doctor at Labour.	No. of previous Labours.	Removed to a Public Institution.	Death.	
1	24 {	Mrs. A. (monthly nurse)	+	?	—	—	{ Mrs. T., influenza cold, Dec. 23. Prematurely confined 8 a.m., Dec. 25. Baby dead in 1 hour. Seen by Dr. N. Mrs. A. arrived after the birth.
2	36 {	Confined in a public institution	+	?	—	—	
3	26	Mrs. X.	—	1	Sanatorium	May 12th	{ Midwife X. attended A.B. F., 28, at her confinement on 13th April. On 17th April A.B. was poorly, and a doctor was called in, who submitted blood on May 1st. This gave an incomplete Vidal notification as enteric fever, May 7th.
4	34	Mrs. X.	—	3	—	—	
5	21	Mrs. X.	—	0	Workhouse	May 30th	{ Mrs. D. laid out a body of a child dying from erysipelas on 14th July. Patient admitted to Infirmary on 21st July. Dr. Ross was shown a large piece of placenta passed on 22nd July.
6	35	Mrs. B.	+	3	—	—	
7	33	Mrs. C.	+	0	—	—	
*8	31	Mrs. D.	—	3	Workhouse	July 22nd	
9	21	Mrs. E.	—	2	—	—	
10	41	Mrs. F.	+	?	Sanatorium	Sept. 30th	
11	38	Miss G.	+	0	S.C. Hospital	—	
+12	—	Mrs. H.	—	?	—	Dec. 27th	

\* The midwife in attendance on Case 8 had her name removed from the Midwives' Roll on 3rd December.

+ The midwife asked her name to be taken off the Midwives' Roll.

The infectivity of septic diseases to women during the puerperium is well illustrated by the remarks regarding cases 3, 4, 5 and 8. Case 1 appears to have arisen from an overlooked case. There is little doubt that A.B. really suffered from puerperal fever, and indirectly infected cases 3, 4 and 5. Unfortunately, A.B. remained unnotified until May 7th, and the three cases notified and one unnotified were infected previous to that date. In case 8 the portion of placenta retained may have provided the nidus for the infection.

In recent years, sufficient evidence has accumulated to show that midwives should avoid persons suffering from inflammatory discharge of any kind, including nasal catarrh, and that they should not attend confinements while so suffering themselves.

Medical practitioners, by the immediate notification of puerperal fever, give the Medical Officer of Health power to prevent the midwife spreading infection. The histories of infection point to the missing and consequent non-notification of a certain number of cases of puerperal fever.

*Number of cases occurring in 1908 in which the Midwife advised that a Registered Medical Practitioner should be sent for (Rule E., 18).*

Medical aid called in on account of the following cases, as stated by the Midwife.	Private Cases.	Outside Cases in connection with Women's Hospital, West Street.
<i>Pregnancy—</i>		
Abortion ... ..	1	—
Ante Partum Hæmorrhage ... ..	—	1
<i>Labour—</i>		
Presentation { Transverse ... ..	1	1
{ Hand ... ..	1	—
{ Prolapse of Cord... ..	—	1
{ Premature Twins ... ..	—	2
{ Premature Triplets ... ..	—	1
Delay in Labour ... ..	—	23
Retention of { Placenta ... ..	—	3
{ Membranes ... ..	—	5
Rupture of Perineum ... ..	—	10
Post Partum Hæmorrhage ... ..	3	4
<i>Lying-in Period—</i>		
Rise of Temperature ... ..	2	3
Weakness of mother after confinement ... ..	1	—
Prolapse of Womb ... ..	1	—
<i>Condition of Infant—</i>		
Weakly Infant ... ..	—	6
Collapsed condition ... ..	—	1
No reason given ... ..	1	—
Totals. . . . .	11	62

## REGISTERED DEATHS FROM CANCER.

Seat of Primary Disease.	Sarcoma.		Carcinoma and Epithelioma		Malignant Disease or Cancer.		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.
Head, Face, Eye, Orbit, Nose, Ear ... ..	—	1	—	—	1	—	1	1
Jaws... ..	—	—	—	—	3	—	3	—
Skin ... ..	—	—	—	1	—	—	—	1
Axilla and Shoulder ... ..	—	—	1	—	—	—	1	—
Mouth, Tongue, Lips ... ..	—	—	2	—	—	—	2	—
Neck, Throat, Tonsils, Larynx...	2	—	3	1	5	—	10	1
Lung, Chest, Mediastinum, Heart	—	—	—	—	2	—	2	—
Œsophagus... ..	—	—	2	—	5	1	7	1
Breast ... ..	—	—	—	7	—	9	—	16
Abdomen ... ..	—	—	1	3	1	7	2	10
Stomach and Pylorus ... ..	—	—	3	7	4	3	7	10
Liver and Gall Bladder ... ..	—	—	1	4	2	5	3	7
Peritoneum, Mesentery, Omentum	—	—	—	1	—	1	—	2
Pancreas ... ..	—	—	—	—	—	—	—	—
Spleen ... ..	—	—	—	—	—	—	—	—
Intestines (excluding Rectum) ...	—	—	3	5	4	2	7	7
Rectum ... ..	—	—	5	12	—	3	5	15
Uterus ... ..	—	—	—	11	—	4	—	15
Ovaries ... ..	—	—	—	1	—	3	—	4
Pelvis, Kidney, Bladder, Prostate Urethra, Penis ...	—	—	4	2	1	4	5	6
Groin, Leg, Foot, Arm, Hand ...	1	—	—	—	1	2	2	2
Parts unspecified ... ..	—	—	1	—	—	—	1	—
Total ... ..	3	1	26	55	29	44	58	100

The total number of deaths registered as due to the various forms of cancer was 158 last year, as compared with 164, 159, 143, 150, 132, 96, 125, 114, and 150 in the eight preceding years. Of the number returned as cancer, 21 occurred in the Workhouse, 13 in the County Hospital, 3 in Shoreham Workhouse, and 1 in the Children's Hospital. Of the total, 7 were visitors, of whom 6 came to Nursing Homes in Brighton.

## TUBERCULOUS DISEASES.

In the following table the registered death-rate from pulmonary tuberculosis or phthisis and from other tuberculosis diseases for a series of years is shewn:—

*Mean Annual Death-Rate in Brighton from Phthisis (Consumption) and other Tuberculous Diseases per 100,000 persons in Groups of Years.*

	Phthisis.	Other Tuberculous Diseases.
Ten years, 1861-70 ... ..	295	98
Ten years, 1871-80 ... ..	247	78
Ten years, 1881-90 ... ..	193	74
Ten years, 1891-1900... ..	148	66
Year, 1901 ... ..	134	59
Year, 1902 ... ..	139	40
Year, 1903 ... ..	145	52
Year, 1904 ... ..	136	67
Year, 1905 ... ..	135	54
Year, 1906 ... ..	144	58
Year, 1907 ... ..	141	53
Year, 1908 ... ..	126	44



Owing to the fact that a larger proportion of the Brighton population than that of England and Wales is at the ages most susceptible to phthisis, a correction factor, which is  $\cdot 9267$ , is needed. 126, multiplied by the above factor, gives a corrected death-rate of 117.

126 is the lowest phthisis death-rate on record for Brighton. During the last ten years the numbers of males and females dying from phthisis have been 1037 males and 716 females, death-rates of 188 for the former and 101 for the latter.

### NOTIFICATION OF TUBERCULOSIS OF THE LUNGS (PHTHISIS).

Voluntary notification of phthisis by medical practitioners was begun in January, 1899, no payments being then made for such notifications. Between that date and September 11th, when the new arrangement came into operation to pay for each case of phthisis notified (in private practice 2s. 6d., and in public practice 1s.), 70 cases were notified. The course of notification is indicated in the following Table :—

Year.	PHTHISIS.					Annual No. of Deaths from Tuberculosis in Brighton.
	No. of New Cases Notified.	No. of Cases Re-notified.	New Cases Notified per 100,000 of Population.	Total No. of Cases Treated in the Borough Sanatorium.	No. of Cases Re-admitted to the Sanatorium.	
1899	111	—	92	—	—	215
1900	105	—	85	—	—	232
1901	153	9	124	—	—	237
1902	224	52	179	31	—	227
				(from May)		
1903	316	82	251	98	—	248
1904	363	85	286	130	—	259
1905	308	102	242	135	6	241
1906	373	119	291	213	32	268
1907	299	104	232	197	36	255
1908	270	64	208	191	31	226

*Details as to Notifications.*—The preceding table gives comparative statistics for ten years. Re-notifications occurred in 64 instances in 1908, 45 cases being re-notified once, 15 twice, 3 three times, and 1 six times during the year.

During the year 421 notifications of consumption were received, 106 in private practice, 138 in public practice, 111 were reported by relieving officers, 52 by the Master of the Workhouse, and 14 by the Medical Officer of Health. The fees paid for notification were £24 4s. 6d. The corresponding facts for other years are set forth below.

Number of Notifications of Phthisis :	1901	1902	1903	1904	1905	1906	1907	1908
Private Practice ... ..	51	62	78	93	98	118	101	106
Public Practice ... ..	80	128	218	233	180	243	181	138
By Medical Officer of Health	—	1	6	8	15	28	7	14
By Relieving Officer and Master of Workhouse ...	29	75	100	118	135	165	170	163
By Relatives ... ..	2	16	12	13	10	—	—	—

Of the 270 new cases notified during last year, 29 died at home, eight in the Workhouse Infirmary, three in the Borough Sanatorium, and two in Shoreham Workhouse; 20 have left the town, 33 have gone to unknown addresses, and in four cases the wrong address was given when notified.

*Stage of Disease at which Notification occurs.*—One case was notified less than a week before death, 10 between 1 and 4 weeks before death, 10 from 1-2 months, four from 2-3 months, six from 3-4 months, seven from 4-6 months, and four from 6-12 months before death.

Of 270 total cases notified for the first time during 1908, 63·3 per cent. are still alive (December 31st, 1908), as compared with 73·6 per cent. on December 31st, 1907, of the cases notified in 1907, and 61·0 per cent. on February 13th, 1907, of the cases notified in 1906.

*Notification of Changes of Addresses* were received respecting 8 patients, enabling prompt disinfection to be done.

*Proportion of the Disease imported.*—Of the 167 deaths from phthisis in 1908, the disease was already present in 35 when the patients came to Brighton; eleven of these patients were notified before death.

Of the 270 notified cases, 10 in addition to the above 11 fatal cases were already ill when they came to Brighton. Thus the total known imported cases in the year was 45.

*Disinfection.*—In 192 notified cases, houses were disinfected after removal of the patients to the Sanatorium or elsewhere, 96 rooms were sprayed with formalin. In five instances walls of rooms were stripped, cleansed, and the ceilings whitewashed; and in 27 instances this was done for the whole house. In 85 instances the rooms, and in 15 instances the whole house, was thoroughly cleansed and the walls rubbed down by the tenant or owner; in two cases the rooms were fumigated with sulphur by the tenant. In 114 instances the bedding, wearing apparel, &c., were washed by the tenants. In 30 instances the bedding and clothing were disinfected by saturated steam under pressure; and in one instance the bedding and clothing was burnt.

After deaths from phthisis and other tuberculous diseases, disinfection was carried out in 140 houses. In 102 cases rooms were sprayed with formalin; and in 5 cases rooms were fumigated with sulphur by the tenant. In 51 instances rooms, and in 4 cases the whole house, were stripped, cleansed and whitewashed. In 52 instances the rooms were thoroughly cleansed; and in 33 instances the walls were rubbed down with a damp cloth. In 11 cases the bedding or clothing was burnt. In 52, the bed-ticks, &c., were washed; and in 79 the bedding was disinfected by steam. Personal apparel was similarly treated.

The sanitary defects found and remedied in connection with visits to cases of, and deaths from, phthisis and other tuberculous diseases are given in other tables.

*Sanatorium Treatment.*—It will be remembered that the interest on £20,000 under the Hedgcock Bequest first became available at the beginning of April, 1906. Before that only 10 consumptive patients at a time had been treated in the Sanatorium. Since then 25 patients at a time are treated. The exact number of new cases treated during 1908 was 160. Of this number 131 had been notified during 1908. The total cases notified that year was 270, which means that 48·5 per cent. of the cases notified during the year had the advantage of Sanatorium treatment and training. The average stay of each consumptive patient was 43 days.



31 cases were re-admitted to the Sanatorium. Of the 131 new cases treated in the Sanatorium, 5 were subsequently admitted to the Infirmary; and of the 139 notified during the year who had not received Sanatorium treatment, 39 were admitted during the year to the Infirmary.

## THE ADVANTAGES OF A STAY AT THE SANATORIUM.

Many of the patients who are unable for work on admission are able to resume work on discharge; and a few early cases go out apparently cured. The direct benefit is therefore considerable.

*Efficient teaching* however is our chief object; this can be more easily done whilst the patient is living under one's own observation than when one can only see the patient at home; the Sanatorium patient can, for instance, realise what is meant by good ventilation, and frequently after returning home he sleeps with his bedroom window wide open. What gives the greatest comfort to both the patient and his friends is the assurance that there is little risk of his spreading infection if he follows out certain simple rules which give the maximum of freedom to the consumptive with the minimum of risk to his associates. Examples of these rules are given below.

It is taught that there is no risk from the consumptive's breath in ordinary breathing, neither is there any appreciable danger from his breath whilst talking quietly; on the other hand the great risk of infection from the spray and sputum, produced in the act of coughing, is emphasized.

*The Spray produced during Coughing.*—Persons breathing within three feet of a tuberculous patient immediately after he has coughed run a risk of inhaling virulent tubercle bacilli. For this reason the phthisical patient who coughs should be kept at least at arm's length, should have a bed to himself, and should cover his mouth whilst coughing (Japanese handkerchiefs are supplied from the Public Health Office for this purpose).

*The Sputum.*—Myriads of tubercle bacilli are contained in the spit, therefore the spit should not be swallowed, neither should it be scattered about by indiscriminate spitting. It has to be remembered that the sputum cannot usually gain entrance to our bodies until it has been dried and broken up into very minute particles, which adhere to very fine dust. So long, therefore, as a patient during the day uses a pocket spittoon, which is washed out and boiled at intervals and uses a cup during the night, which is treated similarly, he is taking all the necessary precautions for the destruction of his sputum. If, however, the patient spits into his handkerchief, or, worse still, on to the floor, he is exposing his companions to serious risk. *If spitting on the floor be permitted*, the workshop, the railway carriage, the common lodging house, the public house, are all especially dangerous. In those places the viscid sputum dries and then is tramped upon again and again until it becomes so minutely divided that particles, adherent to fine dust, can easily be raised into the air. The same thing happens in the living rooms and bedrooms of consumptives, who *are not careful of their spit* either from ignorance, carelessness, or, in advanced cases, from weakness. The dust in these rooms is infectious. [It is for this reason that in choosing patients for Sanatorium treatment preference is always given, other things being equal, to the patient who has not a



bedroom to himself]. A minimum of dust is desirable in the rooms of consumptives, therefore carpets, hangings and articles of furniture not easily cleansed are to be avoided. During its removal, dust must not be allowed to rise into the air, otherwise it may be inhaled, therefore damp cleansing is advised.

*Segregation.*—A certain advantage must follow the segregation of consumptives from the community at large. This is especially so in advanced cases which require nursing. Several advanced cases who could not have a bedroom to themselves at home have been kept at the Sanatorium over long periods. The stay of six of these patients averaged 132 days.

The number of cases of consumption under observation on December 31st, 1908, was 520. All these are receiving regular visits from Inspector Ward.

The Public Health (Tuberculosis) 1908 Regulations necessitates no material change in the administrative procedure in Brighton. The Infirmary starts the year 1909 with 39 phthisical patients.

### BOROUGH ISOLATION HOSPITAL.

	Number of Patients suffering from the following Diseases :—												Fulking Grange.
	Scarlet Fever.	Enteric Fever.	Measles.	German Measles.	Diphtheria.	Erysipelas.	Chicken Pox.	Phthisis.	Puerperal Fever.	Scabies.	Other Diseases.	Total in Sanatorium.	Small Pox.
Remaining in the Sanatorium, Dec. 31st, 1907 ... ..	51	—	—	—	36	—	—	14	—	—	—	101	—
Remaining in Fulking Grange, Dec. 31st, 1907... ..	—	—	—	—	—	—	—	—	—	—	—	—	—
Admitted to Sanatorium during 1908	275	19	3	1	206	2	—	171	2	8	8	695	—
Total number treated in 1908 ... ..	326	19	3	1	242	2	—	185	2	8	8	796	—
Number discharged during 1908 ... ..	294	16	3	1	227	1	—	162	—	8	12	715	—
Died in Sanatorium in 1908 ... ..	1	3	—	—	8	1	—	5	2	—	2	22	—
Remaining in Sanatorium Dec. 31st, 1908... ..	31	4	—	—	7	—	—	17	—	—	—	59	—

Of the above cases 4 of scarlet fever, 2 of diphtheria and 5 of other diseases belonged to the Sanatorium Staff.

The children of inhabitants of the Borough are not charged, but £340 19s. 0d. was paid for the maintenance of other patients in the Sanatorium. Of this amount, £176 9s. 9d. was paid for private patients.

who had special rooms, including patients from boarding schools, £87 12s. 9d. was paid for Poor Law patients, and £76 16s. 6d. for paying patients in the consumptive ward. £12 12s. 0d. was paid for special disinfection done in the town, &c. In addition to the above amounts, £543 5s. 2d. was received for the maintenance of Hedgcock patients who received treatment during 1908.

The table on page 29, prepared by the Borough Accountant, shows the expenditure for the year on the two hospitals. The total number of weeks spent by all the patients in the Sanatorium was 4,288 as compared with 4,102 in 1907. Of the total in 1908, scarlet fever patients spent 1,927 weeks, diphtheria patients 1,177 weeks, and phthisis patients 1,027 weeks. 9 children suffering from scarlet fever were admitted from Warren Farm, 1 with scarlet fever was admitted from Rottingdean and 1 from Henfield, also a case of diphtheria from Hove.

Agreements were entered into by the Borough Council with the Shoreham Port Sanitary Authority and the Newhaven Rural District Council on October 9th and November 5th respectively, under which the former has the use of two beds in the Sanatorium or in Fulking Grange, and the latter has the use of four beds in the Sanatorium.

### SCARLET FEVER.

During the year 275 cases notified as Scarlet Fever were admitted to the Borough Isolation Hospital. In this number only one death occurred.

*Length of Stay of Patients in Sanatorium.*—In the latter half of the year patients were detained in hospital for a considerably shorter period, on an average, than those admitted earlier in the year. This is illustrated by the table below.

In the first six months of the year 123 patients spent 975 weeks (average time 55 days) in the Sanatorium, whereas in the last six months of the year 148 patients spent 802·5 weeks (average time 38 days) in the Sanatorium.

QUARTER.	Week of Discharge.							Total number of Patients.
	5th.	6th.	7th.	8th.	9th.	10th.	Over 10th.	
1st ...	0	2	23	29	18	8	20	61
2nd ...	5	14	20	31	11	13	6	62
3rd ...	5	45	36	10	—	2	2	60
4th ...	32	48	9	3	5	3	—	68
								248*

*Suspected Return Cases.*—The particulars in regard to these are given in the following Table.

\* Cases discharged earlier than the 5th week are not noted, as these were admitted late on in their illness or were doubtful cases.



No.	Sex.	Age.	Date Onset.	Date Admitted.	Date Discharged.	Stay in Hospital.	Interval A.	Interval B.	No.	Sex.	Age.	Onset.
'07 200*	F.	4	Nov. 21	Nov. 21	Jan. 5	45	6	51	7	M.	4	Jan. 11
'07 181*	M.	9	Nov. 21	Nov. 21	Jan. 9	49	87	136	70	M.	2	Apl. 5
'07 163*	M.	6	Nov. 26	Nov. 26	Jan. 11	47	99	146	84	F.	2	Apl. 19
'08 33	F.	10	Feb. 12	Feb. 14	Apl. 7	53	7 See Remarks Column	62	87	F.	4	May 5
51	F.	9	Mar. 7	Mar. 9	Apl. 25	49	18	69	97	F.	35	May 13
105	M.	8	May 30	June 1	Aug. 5	65	58	124	201	M.	13	Oct. 2
142	F.	6	July 31	Aug. 5	Sept. 19	45	12	62	204	M.	8	Oct. 1
163	F.	8	Aug. 25	Aug. 26	Oct. 7	41	17	59	223	M.	10	Oct. 24
229	F.	11	Nov. 3	Nov. 5	Dec. 12	37	9	48	280	M.	8	Dec. 21

\* Cases 200, 181, 163, were admitted with Diphtheria and contracted Scarlet Fever in Hospital.  
[See Note at foot of page 24.]



Complications in Hospital.	Condition on Discharge.	Illness after Discharge.	Degree of Contact.	Other Children susceptible.	Remarks.
Admitted with Diphtheria Nov. 7, Onset, Sc. F., Nov. 21	Desquamation complete	...	Playing with other chil- dren	F. 7	Case 200 was nursed at home for Scarlet Fever in Nov., 1906
Aqueous Nasal discharge, swollen glands both sides, Eczema in left ear, Scurfy spots on body	No desquam- ation, no discharges, Eczema "prac- tically well"	...	Visiting each other's houses	Baby under one year at home	
None	No discharges, spot on buttock still scurfy	Developed Nasal discharge April 10	Was in habit of blowing in Case No. 84's face	None	
None	Tonsils slightly enlarged Submax. glands slightly enlarged	...	...	None	F. 1, sister of Case 33, died from Measles Onset Apl. 14, died May 6. Doctor not called in un- til Apl. 24
None	None	On May 4 developed thick Nasal discharge	...	None	Case 97 con- fined May 26. Baby took Sc. F. on June 3 and got better except for ear dis- charge, but died July 28. A lodger, Case 168, M. 29, sickened with Sc. F. Aug. 31
Nephritis Nasal discharge	None	Looked poorly during Sept.	...	M. 18, 17, F. 19	3 cases oc- curred in the same school, with onsets on Sept. 6, 13 and 15. The Sept. 6 case attended school to Sept. 29
Ear discharge Nasal discharge	Free of all com- plaints	None	Sleeps in same room	M. 8, F. 4, F. 1, F. 14	
None	No discharges, no desquam- ation	...	Slept in same bed	M. 5	Father died in hospital from a septic condition of throat and neck on Apl. 15
Prolonged con- gestion of throat	Slight Nasal discharge on leaving Hos- pital; mother warned of this	...	...	None	Case 237, M. 6, Onset Nov. 9, Sana. Nov. 10, in hosp. Dec. 21

Interval A = Interval between discharge and onset in return case.

Interval B = Interval between onsets in the originating and return cases.

*Complications.*—The number of patients who suffered from the principal complications respectively are given as follows :—

Complication.			Number.		Percentage of total No. admitted.	
Otorrhœa	...	...	30	...	10·9	
Secondary Adenitis	...	...	14	...	5·0	
Late Albuminuria	...	...	5	...	1·8	
Nephritis	...	...	5	...	1·8	
Rheumatism	...	...	10	...	3·7	
Endocarditis	...	...	2	...	·7	
Pericarditis	...	...	1	...	·4	
Pneumonia	...	...	1	...	·4	
Suppurative Conditions—						
Submaxillary Glands	1	}	4	...	1·5	
Mastoid	...	2				
Dacryo-Cystitis	...	1				
Relapse	...	...	7	...	2·6	
Tonsillitis	...	...	3	...	1·1	
Harbouring Diphtheria Bacilli—						
On admission	...	...	9	...	3·3	
During stay	...	...	5	...	1·8	

*Diphtheria.*—During the year 206 patients notified as suffering from diphtheria were admitted to the Sanatorium.

*Deaths.*—Of these 9 died, giving a case mortality of 4·4. These cases are tabulated below :—

No.	Sex.	Age.	Onset.		Doctor called in.		Removed to Sanatorium.		Died.		Remarks.
16	F	10	Jan. 23	...	Jan. 27	...	Jan. 27	...	Jan. 28	...	Tracheotomy, Measles and Diphtheria
43	M	6/12	Feb. 28	...	Feb. 28	...	March 2	...	March 4	...	
90	M	4	May 24	...	May 27	...	May 27	...	May 30	...	
99	F	2	June 11	...	June 14	...	June 15	...	June 15	...	
136	F	9	Aug. 9	...	Aug. 12	...	Aug. 12	...	Aug. 16	...	
189	M	1	Nov. 19	...	Nov. 21	...	Nov. 23	...	Nov. 24	...	
124	M	1	July 15	...	July 22	...	July 22	...	July 27	...	
195	M	2	Nov. 25	...	Nov. 25	...	Nov. 30	...	Dec. 8	...	
206	M	3	Dec. 20	...	Dec. 23	...	Dec. 23	...	Jan. 1	...	

It is now well recognised that if diphtheria cases receive sufficient doses of antitoxin on the first day of disease, practically no deaths occur; it is also proved that the longer the administration of antitoxin is delayed, the greater the chance of death. Deaths from diphtheria are due to carelessness and ignorance. In all the cases above, excepting three, the doctor, on being called in, recognised the condition at once and had the child removed to the Sanatorium.

(NOTE.—Case 136 did not live in the same house as Case 181; this fact, along with the long interval 87 days, justifies its exclusion. Case 124 also was probably not a return case. Excluding those two cases seven cases are left, which make a percentage of 2·6 of the total number of patients admitted to hospital.)

*Tracheotomy Cases.*—Seven diphtheria patients required tracheotomy. These are tabulated below. Only one of these patients died.

No.	Sex.	Age.	Onset.	Doctor called in.	Removed to Sanatorium.	Termina- tion.	
43	M	6/12	Feb. 28 ...	Feb. 28 ...	March 2 ...	Died (March 4)	
46	F	2	March 10...	March 19...	March 19...	Recovered	
48	F	3	March 20...	March 22...	March 22...	Recovered	
49	F	4	March 15...	March 21...	March 21...	Recovered	
86	M	5	May 16 ...	May 20 ...	May 21 ...	Recovered	
1	M	6	July 2 ...	July 4 ...	July 9 ...	Recovered	Notified as Membranous Croup
143	F	2	Aug. 24 ...	Aug. 28 ...	Aug. 28 ..	Recovered	

*Enteric Fever.*—19 patients were admitted to the Sanatorium notified as enteric fever. Of these, four died. One death was due to perforation of the intestine, and two to intestinal hæmorrhage.

The following table shows the number of patients treated at the Sanatorium since 1881. The percentage removal of notified Scarlet Fever cases is also shewn :—



DISEASE.	1881 (four months)	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908
Scarlet Fever ...	23	88	56	157	73	102	147	106	297	162	114	276	352	227	151	204	265	306	706	532	155	127	167	145	164	203	227	275
Diphtheria ...	...	1	...	2	3	3	11	10	5	5	12	43	33	54	90	59	103	223	487	587	646	387	365	261	181	188	245	206
Convalescent Diphtheria...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	18	5	...	...	...	...	...	...	...	...	...	...	...
Typhoid Fever	20	5	27	17	12	12	16	48	61	5	4	26	14	11	11	40	74	85	108	46	27	35	22	26	21	12	21	19
Measles	...	2	9	3	2	4	11	6	83	9	16	1	4	1	15	10	2	2	...	4	2	4	...	8	3	4	2	3
Rötheln (Ger- man Measles)	...	1	1	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	1	...	...	1
Small Pox	21	16	...	2	1	5	...	...	1	...	...	...	9	3	5	4	...	...	...	...	...	4	7	3	...	...	...	...
Erysipelas	...	1	...	...	...	...	...	...	...	...	...	...	2	...	1	2	...	...	...	...	...	...	5	5	6	8	10	2
Whooping Cough	...	...	5	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
Chicken Pox	...	...	...	...	1	...	...	1	...	...	...	...	1	1	1	...	...	...	...	...	1	...	...	4	2	1	1	...
Other Diseases	...	...	...	...	...	...	...	1	...	3	6	6	3	4	3	5	2	3	3	7	6	4	7	3	1	2	3	10
Quarantine	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	...	...	...	...	4*	6	5	1	...	...	...	...
Phthisis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	101	137	140	216	198	...	171
Scabies...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8
TOTALS ...	64	114	98	181	92	126	185	172	447	184	152	352	419	302	284	350	451	619	1304	1176	841	592	677	593	518	635	707	695
Percentage removal to Hospital of notified cases of Scarlet Fever ...	...	...	...	...	...	...	...	...	...	...	70.0	77.7	70.6	82.2	77.4	82.6	81.6	82.7	85.5	87.8	84.1	77.5	78.3	83.7	80.6	72.4	85.6	86.8

\* Doubtful cases of Small Pox.

# FIGURES FOR 1908, COMPARED WITH 1907.

## COUNTY BOROUGH OF BRIGHTON HOSPITALS.

### *Expenditure—Sanatorium, Bear Road.*

	1907.			1908.			Differences.			
	£	s.	d.	£	s.	d.	£	s.	d.	
Salaries and Wages—										
Medical Officer* ... ..	150	0	0	16	1	5	—			
Matron ... ..	90	0	6	90	0	6	—			
Nurses and Servants ... ..	1084	16	8	1125	7	5	+	40	10	9
Labour (gardens) ... ..	139	9	2	130	1	10	—	9	7	4
Repairs ... ..	268	5	5	505	16	11	+	237	11	6
Fuel ... ..	903	8	9	1021	1	3	+	117	12	6
Electricity ... ..	177	11	3	194	5	6	+	16	14	3
Gas ... ..	56	0	3	63	8	2	+	7	7	11
Water ... ..	50	0	0	50	0	0	—			
Milk Pasteurizer ... ..	—			48	10	0	+	48	10	0
Sundry household goods, furniture and repairs ... ..	295	8	4	198	19	6	—	96	8	10
Provisions ... ..	2126	2	5	2075	11	9	—	50	10	8
Drugs and medical sundries... ..	193	16	1	183	12	0	—	10	4	1
Surgeons' fees (special cases) and hire of extra nurses ... ..	105	10	0	74	13	5	—	30	16	7
Dresses for Matron, uniforms for nurses and servants, hospital garments, linen, flannel and drapery goods ... ..	196	8	5	182	9	0	—	13	19	5
Printing, advertising, stationery and stamps ... ..	30	19	11	20	13	0	—	10	6	11
Rates, taxes and insurance ... ..	450	5	0	450	5	0	—			
Travelling expenses, cab hire, carriage, telegrams and sundries ... ..	17	2	9	21	11	5	+	4	8	8
Garden seeds, manure, &c. ... ..	17	3	6	15	14	6	—	1	9	0
Telephone rent ... ..	6	13	3	6	13	3	—			
<i>The Grange, Fulking.</i>										
Wages ... ..	72	16	0	72	16	0	—			
Repairs ... ..	9	17	4	7	12	10	—	2	4	6
Fuel ... ..	16	12	3	11	3	9	—	5	8	6
Sundry household goods ... ..	5	8	2	5	10	6	+	0	2	4
Travelling and miscellaneous expenses... ..	1	7	6	2	10	4	+	1	2	10
Rates, taxes and insurance ... ..	11	1	0	11	1	2	+	0	0	2
Telephone rental ... ..	35	0	0	35	0	0	—			
	£6511	3	11	£6620	10	5		+£109	6	6

\*To Feb. 2nd.

The total expenditure was £6,620 10s. 5d., as compared with £6,511 3s. 11d. in the preceding year, an increase of 2 per cent. The total number of weeks spent by patients in the Sanatorium was 4 per cent. greater in 1908 than in 1907.

During the year a Milk Pasteurizer was fixed at a cost of £48 10s. A considerable amount of painting was done under the directions of the Distress Committee.

From the table given below it will be seen that the price of coal and and coke were on the average higher in 1908 than in 1907.

The comparative prices of coal and coke in the quarters of the years 1907 and 1908 are given :—

	1907.		1908.	
	Coal per ton.	Coke per ton.	Coal per ton.	Coke per ton.
1st quarter ...	20/6	8/8 per chaldron	24/10	22/- — 24/-
2nd quarter ...	20/6	8/8 „ „	21/9 — 24/10	20/10 — 24/-
3rd quarter ...	23/9	20/8	23/-	20/10
4th quarter ...	24/- — 24/10	21/11	23/-	20/10

The Hedgcock income from January to December, 1908, was £543 5s. 2d.



# THE WORK OF THE MUNICIPAL LABORATORY FOR 1908.

	Positive.	Negative.	Doubtful.	No Growth.	Total.
<i>Examination for Diphtheria Bacilli.</i>					
Town Swabs ... ..	101	702	18	50	871
Swabs from Diphtheria Patients on admission to Sanatorium ... ..	141	262	8	24	435
Convalescent Diphtheria In-patients previous to discharge from Sanatorium ...	245	1456	29	142	1872
Swabs from Scarlet Fever Patients in Sanatorium ...	17	353	5	34	409
	(14 patients)				
Total number of Swabs ...	...	...	...	...	3587
<i>Examination for Tubercle Bacilli.</i>					
Town Specimens ... ..	92	287	...	...	379
Sputa from In-patients ...	118	114	...	...	232
Total number of Sputa ...	...	...	...	...	611
<i>Examination of Blood Specimens for Widal reaction.</i>					
Town Specimens ... ..	13	31	12	...	56
In-patients ... ..	6	5	2	...	13
Total number of Serums ...	...	...	...	...	69
Specimens not included above	...	...	...	...	27
Total number of Specimens...	...	...	...	...	4294

The number of specimens examined for a series of years.

		1899	1900	1901	1902	1903	1904	1905	1906	1907	1908
Widal Test for Typhoid Fever		153	95	88	103	106	98	92	57	31	69
Bacterio- logical Diagnosis of	{ Diphtheria ...	2033	2191	2962	2537	3559	3107	2573	2388	2804	3587
	{ Phthisis ...	47	86	125	169	338	472	383	720	672	611
	{ Ringworm, &c	—	—	—	—	—	—	46	18	18	27

With regard to convalescent diphtheria patients, it is the rule to obtain three consecutive negative swabs from nose and throat respectively before a patient is sent home.

*Scarlet Fever Patients.*—A swab, obtained from each patient on admission, is examined, and swabs are also examined whenever an intro-current sore throat or irritating nasal discharge occurs.

The miscellaneous specimens, not classified in detail above, include hairs for ringworm, specimens of urine, &c.

In addition, the milk supply of the Sanatorium is analysed twice weekly for the percentage of fat present.

*Examination of water supplies.*—Careful records are kept of all the analyses made of the five water supplies, and we are gradually collecting a long series of standard analyses for reference, which will enable us rapidly to check any possible departure from normal conditions. It need hardly be said that the water in use from each of the sources of supply is extremely pure. The number of analyses in 1908 has been as follows:—

Number of Samples examined.						Chemically.	Bacteriologically.
Goldstone	...	...	...	...	...	12	12
Mile Oak	...	...	...	...	...	12	12
Shoreham	...	...	...	...	...	12	12
Patcham	...	...	...	...	...	12	12
Falmer ...	...	...	...	...	...	12	12
Total						60	60

*Further work of the Municipal Laboratory.*

- 1.—All the outfits used by the local doctors in the diagnosis of infectious disease are made up in the laboratory. These outfits include swabs used for diphtheria; test-tubes for the collection of sputa; small glass tubes for blood for the Widal reaction.
- 2.—Several of the standard chemical solutions used in the analysis of the waters are made up in the laboratory.
- 3.—All the media used in the bacteriological analysis of water are made in the laboratory. The blood serum is obtained from the municipal abattoir.



## SANITARY WORK OF THE YEAR.

### SANITARY INSPECTION.

In the following Tables, prepared by Mr. Skinner, the Chief Sanitary Inspector, the work of the Sanitary Department is stated, so far as it can be given in tabular form:—

*Inspections during 1908.*

	Totals for 1907.	Totals for 1908.
Number of Streets Inspected ....	307	251
„ Houses and other Premises Inspected ...	13048	17108
No. of Complaints attended to...	819	1010
„ Visits to Slaughter Houses ...	2820	2800
„ „ Cowsheds ...	101	93
„ „ Bakehouses ...	194	258
„ „ Dairies and Milk Shops ...	353	329
„ „ Provision Shops ...	4329	4171
„ „ Restaurants ...	105	92
Number of Day Visits to Common Lodging-Houses ...	229	238
Number of Night Visits to ditto ...	135	104
„ Visits in respect of Sickness ...	3810	4704
„ Visits to Disinfect Rooms ...	892	806
„ Visits for Removal of Bedding ...	682	689
„ Drains Tested by Volatile Test ...	61	32
„ Drains Opened for Examination...	391	276
„ Visits for Sundry Purposes ...	8084	7713
„ Visits to look up Notices served...	5608	5375
„ Attendances at Police Court ...	27	18
„ Samples Collected for Analysis ...	518	516
„ Inspections of Stables ...	1570	1662
„ Wastes of Water Reported ...	68	48
„ Letters sent to Schools and Public Library ...	1675	1549
Meteorological Observations taken ...	730	1098
Visits to Schools ...	152	149
Number of Visits under Factory and Work-shops and Shop Hours Acts...	4117	4666
Drains Flushed ...	28	24
Circulars Delivered <i>re</i> Diarrhoea, &c....	11000	11000
Markets Committee, One Inspector ...	11 days.	13 days.
Visits to Houses Let in Lodgings (Day)	219	235
„ Offensive Trades ...	160	203
Smoke Observations ..	181	118
Contagious Diseases (Animals) Act ...	32	5
Visits to Ice Cream Vendors ...	82	59

It will be seen by the above table that 4,171 visits have been made to provision shops during the year; these were principally to the fish shops, to ensure the regular removal of the offal and empty boxes, &c., in which the fish arrived, as well as to see that the utensils used in the fried fish shops were kept clean, as if these are allowed to become dirty the nuisance caused by the frying is intensified.

All stables have been regularly inspected and the prompt removal of the manure insisted on. Very few complaints are now received of offensive smells from stables.

118 smoke observations have been made during the year, and notices

served on the offenders. The nuisance from smoky chimneys in the town is steadily diminishing.

All premises where offensive trades are carried on have been regularly visited, and the frequent removal of offensive matter insisted on.

59 visits were made during the hot weather to premises where ice cream is manufactured, to see that proper precautions were taken to prevent its contamination.

The visits for sundry purposes include the testing of house drains after repairs and alterations, but not the testing of new drains. The latter is done by the Borough Surveyor's department. Visits to premises with builders and owners, to arrange details for carrying out the work ordered, inspections of common passages at the rear of houses, waste land, areas of unoccupied houses, and visits to dirty houses are also included under this head. Houses occupied by dirty tenants are kept under observation until an improvement in their condition is made.

Many of the complaints received were due to the keeping of fowls, rabbits, pigeons, &c., in the back yards of houses. This practice is most objectionable and sometimes causes serious nuisance.

Many visits have been made in company with the Inspectors of the National Society for the prevention of Cruelty to Children to houses where the children have been found suffering from neglect. These joint visits have been very beneficial to the children, both physically and morally.

Considerable trouble has, during previous years, been experienced in the north part of the town from gipsy encampments on waste land. These people are not only a menace to the occupiers of the houses in the vicinity of their encampments, by reason of their vicious habits, but they live under conditions which are opposed to all sanitary principles and decency, men, women, and children of both sexes, all sleep together in a single van or tent, which is generally badly overcrowded, and they have no sanitary conveniences.

During the past year a successful effort has been made to deal with this nuisance; the waste land on which the gipsies encamp has been kept under close observation by the Inspectors, and as soon as an encampment was discovered, an Inspector, accompanied by Police Constables to prevent a breach of the peace, has ordered the removal of the vans and tents, and seen them removed from the town. 29 visits were made for this purpose, and 22 encampments, consisting of 93 vans and carts and 22 tents, were removed.

On September 8th and 9th, a strong south-west gale occurred, in consequence of which a large quantity of seaweed was washed up and left on the beach, this continued after each tide for several days afterwards. The accumulation was so large that in many places the seaweed was piled up by the action of the waves to a height of five feet.

If this had been allowed to remain on the beach and decompose, a very serious nuisance would have arisen, as the smell from decomposed seaweed is very offensive, and is frequently mistaken for sewer gas. In order to prevent this, it was necessary to remove the seaweed from the beach as quickly as possible, and 1,647 large cartloads were removed at a cost of £299 0s. 0d.

The sanitary inspections enumerated in the preceding table have been followed by the serving of the notices given in the next table. A large proportion of the work is done on the strength of verbal recommendations or preliminary notices.



*Notices served during 1908.*

Nature of Notice.	Warning and Verbal Notices.						Final Notices.				Total number of notices complied with	
	Number served.		Number complied with before service of final notice.		Number reported for final notice.		Number served.		Number complied with.			
	Owners.	Occupiers.	Owners.	Occupiers.	Owners.	Occupiers.	Owners.	Occupiers.	Owners.	Occupiers.	Owners.	Occupiers.
To drain into sewer and fill up cesspools ... ..	2	—	—	—	2	—	3	—	3	—	3	—
To relay drain and fill up cesspools ... ..	3	—	1	—	2	—	2	—	2	—	3	—
To relay drain ... ..	238	—	168	—	70	—	62	—	62	—	230	—
To repair drain or soil pipe	85	1	50	—	35	1	38	—	38	—	88	—
To trap drain ... ..	46	—	25	—	21	—	20	—	18	—	43	—
To cleanse and whitewash rooms .. ..	249	41	149	23	100	18	121	13	120	13	269	36
To clear drain or soil pipe	69	30	31	10	38	20	66	2	66	2	97	12
To clear, repair or cleanse closet, or repair flushing apparatus or pan ...	459	142	256	75	203	67	219	54	217	54	473	129
To repave yard or scullery	264	3	145	3	119	—	117	—	114	—	259	3
To abate other nuisances..	672	71	405	54	267	17	270	16	267	16	672	70
To provide covered dust bins	559	1	317	1	242	—	271	—	263	—	580	1
To provide premises with a proper water supply ...	—	—	—	—	—	—	3	—	3	—	3	—
To cleanse premises and remove foul accumulations	84	289	20	146	64	143	50	174	50	174	70	320
To provide manure receptacles ... ..	7	—	3	—	4	—	3	—	3	—	6	—
To remove foul manure pits	6	—	4	—	2	—	2	—	2	—	6	—
To provide W.C. accommodation ... ..	8	—	6	—	2	—	4	—	4	—	10	—
To render damp walls with cement compo ... ..	50	—	19	—	31	—	34	—	33	—	52	—
To lay on water to closets...	11	—	6	—	5	—	14	—	14	—	20	—
To abate overcrowding ...	—	96	—	19	—	77	—	71	—	70	—	89
To discontinue keeping animals so as to be a nuisance ... ..	—	159	—	44	—	115	—	111	—	111	—	155
To abate smoke nuisance...	—	42	—	40	—	2	—	5	—	5	—	45
To cleanse and whitewash bakehouses ... ..	—	43	—	39	—	4	—	4	—	4	—	43
To cleanse and whitewash workrooms .. ..	—	25	—	23	—	2	—	5	—	5	—	28
To alter water pipes ...	2	—	1	—	1	—	—	—	—	—	1	—
To pave and drain stables	4	—	1	—	3	—	2	—	2	—	3	—
To discontinue to let or occupy cellar dwellings...	—	3	—	2	—	1	—	—	—	—	—	2
Totals ... ..	2818	946	1607	479	1211	467	1301	455	1281	454	2888	933

It will be seen by this table that a large number of notices were served to repave the yard or scullery; many of these were to pave the portion of the yard or forecourt adjoining the house wall, to prevent dampness, and where this has been done the result has been very satisfactory. Many damp houses have been made dry by adopting this course, and also by rendering the external surface of the walls with Portland cement compo.

No summonses were required during the year to enforce the removal of nuisances, and during the past 8 years only four such summonses have been necessary. This proves the absence of friction between the department and the public, especially in view of the magnitude of the repairs and alterations carried out each year.

### COMMON LODGING HOUSES.

Eleven are at present registered, having accommodation for 351 lodgers. The bye-laws have been properly carried out in these houses during the past year.

### HOUSES LET IN LODGINGS.

Bye-laws for houses of a rateable value not exceeding £26, and having four families in them if the landlord lives in the house, were confirmed by the Local Government Board, on July 13th, 1893. Sixty-one such houses are now on the register.

There has been no breach of the bye-laws respecting these houses during 1908.

### REMOVAL OF HOUSE REFUSE.

In accordance with the arrangement made with the Borough Surveyor's Department, the following information has been supplied, and the necessary notices served in each instance.

No dust bins, defective bins, &c.	...	...	...	116
Other sanitary defects	..	...	...	None

### HOUSING OF THE WORKING CLASSES ACT, PART II.

Official representations have been made by me, under Part II. of the above Act during 1908, that the following premises are in a state so dangerous to health, as to be unfit for human habitation:—

Situation of Premises.	No. of houses.	Legal proceedings taken.	Result.
Little George Street ...	8	No	Houses put into thorough repair.
Church Street ...	1	No	Ditto.
Essex Place ...	1	No	Ditto.

### FISH MARKET.

During the year no complaints were received of bad smells from the Fish Market. Every possible care has been taken to prevent this, but owing to the market being situated under the Parade and without means of through ventilation, it is difficult to avoid some smell in the hot weather.

The premises have been kept under close observation by Mr. Skinner, the Chief Inspector, who has taken steps to prevent two of the chief



causes of the bad smells complained of in the past, viz., the depositing of decomposing fish offal in the offal cart by shopkeepers to save themselves the expense of having it removed from their shops daily, and the accumulation of empty fish boxes, &c., in the market, all empties are now removed daily, Sundays excepted.

During 1908 the following fish have been surrendered in the Fish Market and destroyed by arrangement with the owners :—

Wet Fish.			Dried Fish.	Shrimps and Prawns.	Shell Fish.	
Flat Fish.	Herrings and Mackerel.	Other Wet Fish.			Whelks and Winkles.	Other Shell Fish.
cwts. qrs. lbs.	cwts. qrs. lbs.	cwts. qrs. lbs.	cwts. qrs. lbs.	cwts. qrs. lbs.	cwts. qrs. lbs.	
27 0 0	44 0 0	71 0 0	52 2 0	30 0 7	28 2 0	Oysters, 2,550 Escallops, 252 Cray Fish, 1 cwt.

Total weight (not including Oysters and Escallops), 12 tons 14 cwt. 0 qr. 7 lbs.

#### PUBLIC ABATTOIR.

The Public Abattoir has been open 14 complete years, The number of animals slaughtered each year is shewn in the following table :—

Year.	No. of Animals Slaughtered.
1894	433
1895	6,991
1896	11,184
1897	12,054
1898	12,650
1899	16,384
1900	18,304
1901	17,645
1902	20,318
1903	22,962
1904	25,804
1905	26,978
1906	26,875
1907	24,889
1908	24,769

The number of animals killed in 1908 was 24,769, viz. :—

2,393 beasts,	} in the public slaughter-houses,
1,576 calves,	
718 lambs,	
7,130 sheep,	
8,326 pigs,	
and	
7 beasts,	} in the private slaughter-houses.
18 calves,	
156 lambs,	
1,347 sheep,	
3,236 pigs,	

The amount received in tolls since the opening of the Abattoir has been as follows:—November and December, 1894, £7 13s. 4d.; 1895, £102 15s. 4d.; 1896, £122 4s.; 1897, £115 7s. 7d.; 1898, £185 10s. 3d.; 1899, £243 9s. 4d.; 1900, £279 17s.; 1901, £271 13s. 10d.; 1902, £352 14s. 10d.; 1903, £402 11s. 10d.; 1904, £433 4s. 3d.; 1905, £451 9s.; 1906, £467 5s. 2d.; 1907, £515 2s. 3d.; 1908, £436 11s. 7d.

In addition to the above amounts there is also an income of £64 7s. per annum from the rental of private slaughter-houses at the Abattoir, and £10 from sale of offal.

### PRIVATE SLAUGHTER-HOUSES.

In various parts of the town 33 private slaughter-houses are in use. The bye-laws for slaughter-houses have, on the whole, been fairly well carried out during the year, no case requiring prosecution having arisen. Each slaughter-house is visited several times a week by Inspector Cuckney, the Superintendent of the Abattoir.

#### *Unsound Meat Seized or Surrendered during 1908.*

Description.	Number of Animals.	Number condemned by Magistrate.	Number condemned by arrangement with owners.	Total weight in lbs.
<i>A.—At the Abattoir—</i>				
Bullocks (whole carcase) ...	8	—	8	6000
„ (part of carcase) ...	343	—	343	7598
Calves (whole carcase) ..	7	—	7	455
„ (part of carcase) ...	10	—	10	100
Sheep (whole carcase) ...	9	—	9	744
„ (part of carcase) ...	84	—	84	496
Pigs (whole carcase) ..	48	—	48	5511
„ (part of carcase) ...	821	—	821	6647
	1330	—	1330	27551
<i>B.—In the Private Slaughter-Houses and Shops—</i>				
Bullocks (whole carcase) ..	8	—	8	4700
„ (part of carcase) ...	305	—	305	9315
Calves (whole carcase) ...	5	—	5	423
„ (part of carcase) ...	10	—	10	148
Sheep (whole carcase) ...	30	2	28	1728
„ (part of carcase) ...	100	—	100	1347
Pigs (whole carcase) ...	15	—	15	1986
„ (part of carcase) ...	110	—	110	1165
	583	2	581	20812

*Tuberculosis.*—Of the beasts, 2 steers, 1 heifer, and 11 cows were found to be diseased to such an extent that the whole carcase was destroyed. 297 parts of beasts were also found to be tuberculous. 3 calves, and 6 parts, 34 pigs, and 340 parts of pigs were also found to be tuberculous.

Two Argentine ox-tongues were found to be affected with tubercle. One case of boneless cow beef was found to contain pieces of meat which had been derived from a tubercular animal.



## OTHER FOODS SEIZED OR SURRENDERED IN 1908.

Rabbits, "Australian," 238; hares, 1; tinned food, 75 tins; pears, 5 bushels; cherries, 10 bushels; carrots, 1 ton 13 cwts.; Pears, 3 barrels and 7 baskets; new potatoes, 28 lbs.; old potatoes, 7 tons 6 cwts.

Two dealers were fined 50s. and costs each, or 21 days' imprisonment, for exposing the unsound carcase of an ewe for sale.

Two dealers were fined 60s. and costs each, or 1 month's imprisonment, for exposing the unsound carcase of an ewe for sale.

## SALE OF FOOD AND DRUGS ACTS.

Number of samples collected	...	...	...	501
„ „ adulterated	...	...	...	53
„ prosecutions	...	...	...	11
„ convictions	...	...	...	7
„ withdrawn	...	...	...	4
Aggregate amount in fines	...	£15	10	0
Analyst's fees recovered	...	3	6	6
		£18	16	6
Cost of samples	...	£3	3	9½
Cost of assistance, postage and railway fares	...	6	2	0½
Cost of analysis	...	160	14	6
Analyst's salary	...	50	0	0
		£220	0	4
Fines & Analyst's fees recovered		18	6	6
Net cost of working the Act	...	£201	13	10

Five milk sellers were fined amounts varying from 60s. to 10s. One butter hawker was fined £5 for selling butter adulterated with 97 per cent. of margarine. One butter hawker was summoned for selling margarine in a plain wrapper; the case was withdrawn on payment of costs.

One chemist was fined 20s. and costs for selling Easton's syrup devoid of strychnine.

## PUBLIC ANALYST'S REPORT.

By MEREDITH WYNTER BLYTH, B.A., B.Sc., F.I.C.

*Table showing total samples of Milk analysed, and proportion watered or deficient in fat, from 1900 to 1908.*

				Total samples.	Below standard.	Per cent. below standard.	Average per cent. of fat.
Week-day samples	{	Wholesale, 1900-1907	...	710	33	4·64	3·60
		1908	...	57	1	1·75	3·61
	{	Retail, 1900-1907	...	1315	152	11·55	3·52
		1908	...	318	47	14·77	3·50
Sunday samples	{	Wholesale, 1900-1907	...	36	—	—	3·83
		1908	...	—	—	—	—
	{	Retail, 1900-1907	...	314	31	9·87	3·52
		1908	...	12	—	—	4·77

The higher percentage of retail samples found adulterated in 1908 is accounted for by the adulterated undivided samples being more numerous than usual. The samples were distributed as follows:—

	Number.	Below standard.	Per cent. below standard.	Average per cent. of fat.
Undivided Retail Samples ...	155	32	21·2	3·43
Divided Retail Samples ...	163	15	9·81	3·58

*Sunday Samples.*—At one time the samples purchased on Sundays shewed a very high percentage of adulteration. This number, owing to frequent sampling and successful prosecutions, was reduced to a very low figure. During 1907 and 1908 very few samples were purchased on Sundays, too few in fact to warrant any conclusions as to the present amount of Sunday adulteration. I cannot, however, help thinking that to prevent any temptation to tamper with Sunday milk, regular and frequent samples should be taken on this day. The same remarks apply to Bank Holidays.

*Sterilized Milk.*—Two samples of sterilized milk purchased were found to contain only 1·3 and 1·1 per cent. of fat respectively. On heating milk, the fat tends to rise and collect at the surface, and it is possible in badly prepared sterilized milk to get the fat very unevenly distributed. In well prepared sterilized milk, the milk is passed through a machine known as a “Homogeniser,” which effectually prevents any tendency of the fat to rise.



*Table shewing the result of the analysis of samples taken under the Sale of Food and Drugs Act during the year 1908.*

Samples of	Number of Samples.	Adulterated.	Percentage of Adulteration.	Nature of Adulteration.
*Milk ... ..	375	48	12·80	Below standard for fat or solids not fat. Addition of foreign fat. Excess of water.
Butter ... ..	74	3	4·05	
Margarine ... ..	11	—	—	Spirits of nitre deficient in nitrous ether. Deficient in proof spirit.
Cheese ... ..	6	—	—	
Lard ... ..	7	—	—	
Condiments ... ..	9	—	—	
Drugs ... ..	8	1	1·25	
Spirits ... ..	7	1	1·42	
Flour ... ..	4	—	—	
1908—Total ..	501	53	10·57	
1907— „ ...	506	50	9·88	
1906— „ ...	501	61	12·17	
1905— „ ...	503	60	11·92	
1904— „ ...	501	47	9·38	
1903— „ ...	507	92	18·14	
1902— „ ...	502	114	22·70	
1901... „ ...	490	93	18·97	

\* Note on Milk taken in 1907 and 1908 :—

Year.	Total.	Adulterated.	Percentage of Adulteration.	Average Percentage of Fat.
1907 ...	326	30	9·20	3·47
1908 ...	375	48	12·80	3·51

## THE LOCAL ADMINISTRATION OF ACTS RELATING TO FACTORIES, WORKSHOPS, WORKPLACES, BAKE- HOUSES, OUTWORKERS, SHOP HOURS, SHOP SEATS AND THE EMPLOYMENT OF CHILDREN.

It will be noticed from the tables given with this portion of my report, that whilst there have been fewer inspections made of factories and workshops, there has been a considerable increase in the number of shops inspected.

This is principally due to work in connection with closing orders under the Shop Hours Act of 1904.

4,663 visits were made for the purpose of carrying out the provisions of the various Acts.

Of these 3,547 were for the purpose of inspection, and 1,116 for the purpose of looking up works, serving notices, &c.

The ordinary inspections under the Public Health Act, as to nuisances and sanitary arrangements, were made concurrently with most of the inspections of shops and workshops.

The following figures show the number of inspections made, and also the proportion of work done under each Act:—

	Inspector Mills	...	4,056 visits.	
	„ Ward	...	607	„
	On Register.			Inspections made.
Factories	...	247	...	...
Workshops	...	2,128	...	...
Workplaces	...	138	...	...
Shops	...	4,600	...	...
		<hr/>		
		7,133		<hr/>
		<hr/>		<hr/>
Of 2,513	{ Factories, Workshops, Workplaces, }	20 night and 1,311 day inspections were made.		
Of 4,600	{ Shops and Premises where children are employed, }	21 night and 2,377 day inspections were made.		

The night inspections were all made by Inspector Mills, between 9 p.m. and 6 a.m.

The following alterations have been made in the Factory and Workshop Register:—

		Closed.			Added.
Factories	...	2	...	...	11
Workshops	...	236	...	...	278

Most of the alterations in workshops are due to change of address of outworkers, and the increase in factories to the conversion of workshop laundries into factory laundries.



88 new workrooms have been measured and the cubic capacity entered on cards or abstracts.

Five complaints have been received from H.M. Inspector as to defects and nuisances in factories and workshops.

Five complaints have been received and forwarded to H.M. Inspector in respect of irregularities in Factories not remediable under the Public Health Acts ; one each in respect of excessive hours, excessive heat, overcrowding, deficient ventilation and accommodation for meals.

Notice of occupation of 16 new factories and workshops have been sent in by H.M. Inspector.

Notices of 30 new workshops and factories in which no abstracts were shewn, were forwarded to H.M. Inspector.

The amendment of the Factory and Workshop Act, which came into force January 1st, 1908, and which was passed to include under its general provisions Laundries incidental to the purpose of a public institution, or ancillary to another business, and institutions in which work is carried on by way of trade or for the purpose of gain, has added 7 factories and 9 workshops to our register.

### BAKEHOUSES.

The Act requires that these shall all be inspected twice in each year. This year, for the first time for a considerable number of years, it has not been found necessary to ask for extensive alterations in any bakehouse ; speaking generally, the bakehouses are now in a very satisfactory condition structurally, and Inspector Mills' work is confined to impressing on some of the occupiers the necessity of continual cleanliness in the preparation of such important articles of food as bread and pastry.

258 inspections were made and 66 breaches of the special regulations were dealt with.

### HOMEWORKERS.

Considerable difficulty is still experienced in getting the employers to send in their lists of outworkers on the date required ; 85 letters were sent warning them, whilst many of the employers were also visited personally in respect of this failure.

285 inspections were made of outworkers' workrooms, and though the majority of outworkers have to work in bedrooms, kitchens or living rooms, they are generally very clean ; there were a few exceptions, but all these were remedied by notices served under the Public Health Act without having to take the extreme course of closing under Section 108.

Infectious disease occurred in 6 outworkers' homes, and in every case full precautions were taken against any spread of the disease.

### WORKPLACES.

The majority of these are restaurants, and this year's inspections found the condition of kitchens and premises on the whole satisfactory.

### SHOP HOURS ACT, 1892-5.

Several complaints were received during the year from shop assistants and their friends, but most of these complaints were in respect of matter for which the law provides no remedy, such as absence of proper time for meals and excessive hours for women. All the complaints made in respect of persons under 18 years of age were investigated, but in only one case was it found that the 74 hours allowed by the Act had been exceeded.

154 shops employing persons under 18 years of age were found without the necessary abstract exhibited, and copies of the abstract were served on all of these.

### SHOP HOURS ACT, 1904.

There has been a considerable amount of work under this Act during the current year. A Local Government Board Inquiry was held on the question of the application by the hairdressers for a closing order, and as a consequence of that inquiry it was decided to take another vote of the shops affected. These were all visited, and the register corrected by Inspector Mills. Subsequently a vote was taken, and the necessary two-thirds majority obtained in favour of the order.

The order was then confirmed, and these shops from 1st August closed on Thursdays at 2.0 p.m. Three shops chose the alternative of closing on Saturdays at 2.0 p.m.

The Closing Order must be an undoubted boon to a very large number of hairdressers' assistants, the hours in this business being generally much longer than in any other class of shop. In the carrying out of this Act it has been arranged that the Police, as well as Inspector Mills, shall report to the Town Clerk any breach of the law.

Subsequently the bootsellers applied for a closing order, and in October Inspector Mills visited all the shops affected by the proposed order for the purpose of making the register. A vote was subsequently taken, and the necessary two-thirds majority not being obtained the order failed.

### SEATS FOR SHOP ASSISTANTS ACT.

Forty-three shops, in which more than three female assistants are employed, were visited during the year, and, with two exceptions, were all provided with the necessary seats.

### DAIRIES AND MILKSHOPS.

There are 320 persons on the register of dairymen and milk sellers, whose premises have been inspected by Inspector Ward. The premises and conditions are generally satisfactory.



1908.

# FACTORIES, WORKSHOPS, LAUNDRIES, WORKPLACES AND HOMEWORK.

1.—*Inspection. Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.*

Premises.  (1)	Number of		
	Inspections. (2)	Written Notices. (3)	Prosecutions. (4)
Factories ... .. (Including Factory Laundries).	69	21	—
Workshops ... .. (Including Workshop Laundries).	948	98	—
Workplaces ... .. (Other than Outworkers' premises included in Part 3 of this Report).	131	4	—
Total ... ..	1148	123	—

2.—*Defects found.*

Particulars.  (1)	Number of Defects.			Number of Prosecu- tions.  (5)
	Found. (2)	Remedied. (3)	Referred to H.M. Inspector. (4)	
<i>Nuisances under the Public Health Acts :—*</i>				
Want of cleanliness ... ..	47	45	—	—
Want of ventilation ... ..	10	10	—	—
Overcrowding ... ..	2	2	—	—
Want of drainage of floors ... ..	6	6	—	—
Other nuisances... ..	40	38	—	—
†Sanitary accom- modation	insufficient ... ..	6	4	—
	unsuitable or de- fective ... ..	38	36	—
	not separate for sexes ... ..	3	3	—
<i>Offences under the Factory and Workshop Act :—</i>				
Illegal occupation of underground bakehouse (S. 101) ... ..	—	—	—	—
Breach of special sanitary require- ments for bakehouses (SS. 97 to 100) ... ..	66	63	—	—
Other offences ... .. (Excluding offences relating to out- work which are included in Part III. of this Report).	3	3	—	—
Total ... ..	221	210	—	—

\* Including those specified in sections 2, 3, 7 and 8, of the Factory and Workshop Act as remediable under the Public Health Acts.

† Sec. 22 of the Public Health Acts Amendment Act is in force in Brighton.

1908.  
3.—Home Work.

Nature of Work.*	Outworkers' Lists, Section 107.										Number of Inspections of Outworkers' premises.	Outwork in Unwholesome Premises, Section 108.			Outwork in Infected Premises, Sections 109, 110.		
	Lists received from Employers.		Once in the year.	Numbers of Addresses of Outworkers received from other Councils.		Number of Addresses of Outworkers forwarded to other Councils.	Prosecutions.		In-stances.	Prose-cutions.		In-stances.	Orders made (S.110).	Prose-cutions (S.109, 110).			
							Failing to keep or permit inspection of lists.	Failing to send lists.									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)		(11)	(12)	(13)	(14)	(15)	(16)
Wearing Apparel—																	
(1) Making, &c.	112	779	5	9	93	19	—	—	285	—	—	—	6	—	—		
Furniture and Upholstery ...	6	23	—	—	—	—	—	—	—	—	—	—	—	—	—		
Other Trades ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Total ...	118	802	5	9	93	19	—	—	285	—	—	—	6	—	—		

\* Where an occupier gives out work of more than one class, each class is separately enumerated.



4.—Registered Workshops.

Workshops on the register (s. 131) at the end of the year. (1)	Number. (2)
Making of wearing apparel ... ..	1150
Bakehouses ... ..	180
Laundries ... ..	154
Furnishing Trades ... ..	164
Building Trades ... ..	122
Other Trades ... ..	358
Total number of workshops on Register ... ..	2128

5.—Other matters.

Class (1)	Number (2)
Matters notified to H.M. Inspector of Factories :—	
Failure to affix Abstract of the Factory and Workshop Act (S. 133) ... ..	30
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (S. 5) ... ..	5
Other ... ..	5
Underground Bakehouses (S. 101) :—	
Certificates granted during the year ... ..	—
In use at the end of the year ... ..	104

TABLE I.—(*Vital Statistics of Brighton during 1908 and previous Years*).

YEAR.	Population estimated to Middle of each Year.	BIRTHS.		DEATHS UNDER ONE YEAR OF AGE.		DEATHS AT ALL AGES. TOTAL.		DEATHS IN PUBLIC INSTITUTIONS.	Deaths of Non-residents registered in public institutions within the Borough.	Deaths of Residents registered in public institutions beyond the Borough.	DEATHS AT ALL AGES NET.	
		Number.	Rate.†	Number.	Rate per 1,000 Births registered.	Number.	Rate.†				Number.	Rate.†
1	2	3	4	5	6	7	8	9	10	11	12	13
1898 ..	121,270	3035	25.0	544	179	—	—	386	—	—	—	—
1899 ...	122,040	3058	25.1	530	173	—	—	447	—	—	—	—
1900 ...	122,860	2920	23.8	484	166	—	—	501	—	—	—	—
1901 ...	123,668	2984	24.1	483	162	2085	16.8	485	68	—	2025	16.4
1902 ...	124,539	3072	24.3	387	125	2052	16.2	525	92	15	1975	15.7
1903 ...	125,405	3046	24.3	348	114	1833	14.6	458	72	8	1769	14.1
1904 ...	126,286	2963	23.5	395	133	2156	17.1	516	96	7	2060	16.3
1905 ...	127,183	2901	22.8	297	102	1739	13.6	462	94	51	1696	13.3
1906 ...	128,095	2853	22.3	317	111	1887	14.7	499	86	60	1861	14.53
1907 ...	129,023	2710	21.0	301	111	1895	14.69	534	71	71	1895	14.69
Averages for years 1898-1907	124,136	2954	23.6	408	137	—	—	481	—	—	—	—
1908 ...	129,976	2809	21.2	293	104	1956	14.77	526	75	70	1951	14.73

† 1908 was a 53 week year; the rates have been multiplied by the factor  $\frac{53}{52}$  in order to make them comparable with those of former years.



TABLE II.

	Births in 1908.	Number of Deaths during 1908.											
		All causes.	Deaths under one year.	Small Pox.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Measles.	Whooping Cough.	Diarrhoea.	Phthisis.	Other Tubercular Diseases.	Bronchitis and Pneumonia.
Kemp Town	108	92	13	—	—	—	—	—	1	—	9	1	11
Queen's Park	200	145	21	—	—	1	—	2	1	2	14	4	21
Pier... ..	197	187	25	—	—	1	—	3	3	3	21	6	26
Pavilion ...	67	51	3	—	—	—	1	1	—	—	5	1	3
Regency ...	82	86	9	—	1	—	—	—	—	2	7	2	12
West ...	33	79	5	—	1	—	1	—	2	—	2	2	13
Montpelier	73	72	7	—	—	—	—	—	—	1	5	—	13
St. Nicholas	196	122	17	—	—	3	—	—	1	1	13	9	20
St. John's ...	352	197	51	—	—	1	1	1	4	7	14	8	31
Hanover ...	300	188	42	—	—	1	—	2	2	3	15	6	44
Lewes Road	444	235	37	—	—	1	—	6	1	1	21	7	46
St. Peter's...	156	99	16	—	—	—	—	3	1	2	8	—	18
Preston Park	251	141	18	—	—	—	1	1	1	7	17	4	15
Preston ...	350	199	29	—	—	1	1	3	1	2	16	9	22
Total ...	2809		293	—	2	9	5	22	18	31	167	59	295

The above total number of deaths does not include six due to drowning in the sea.

Of the 283 deaths in the Workhouse, five were of children who were born in the Workhouse.

The Queen's Park Ward contains the Workhouse. Where the information was obtainable, deaths in this Institution have been distributed to the Wards from which the patients were removed to the Workhouse. There remains 21 deaths (out of the 145 in the Queen's Park Ward) which occurred in the Workhouse, of patients whose address was unknown. Of these, two were due to phthisis and one to whooping cough.

The 73 deaths in the Montpelier Ward do not include the deaths of a number of children occurring in the Children's Hospital, whose home addresses were known, these being stated in the Wards to which they belong.

INFANTILE MORTALITY DURING THE YEAR 1908.—Deaths from Stated Causes in Weeks and Months under one year of age.

*There were no deaths from the diseases given in the corresponding official table of the Local Government Board, which are omitted in the above table.*







TABLE IV.

Deaths from all causes in 1908 separated into age-groups.

CAUSES OF DEATH.	AGE AT DEATH.																TOTAL.		TOTAL.	
																	Males.	Females.		
	0-1	1-2	2-3	3-4	4-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65	65-75	75-85	85 and upwards				
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Males.	Females.	
Valvular Diseases of Heart	...	...	1	...	...	1	2	1	...	2	...	...	...	...	...	...	...	25	42	67
Angina Pectoris	...	...	...	...	...	...	...	...	...	...	...	2	...	1	3	1	...	6	3	9
Aneurism	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	6	...	6
Senile Gangrene	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
Embolism	...	...	...	...	...	...	...	...	...	2	...	...	1	2	...	...	1	4	5	9
Phlebitis	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Other and ill-defined Diseases of Heart and Circulatory System	1	...	...	...	...	1	...	...	...	2	2	8	26	24	29	23	3	96	110	206
Laryngitis	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Croup	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
Bronchitis, Acute	9	10	5	6	...	...	...	...	...	...	...	1	1	...	3	1	...	20	28	48
Bronchitis, Chronic	...	...	...	...	...	...	...	...	...	...	2	2	5	4	10	14	2	35	55	90
Pneumonia, Lobar	1	...	...	1	...	...	...	...	...	1	...	...	...	1	...	...	...	4	5	9
Pneumonia, Lobular	13	12	8	7	1	2	...	...	...	2	...	...	1	...	1	2	...	28	31	59
Pneumonia	13	5	7	3	...	...	1	1	1	...	4	5	6	4	5	3	...	51	38	89
Emphysema, Asthma	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	1	4
Pleurisy	...	...	...	...	...	...	...	...	1	...	1	...	1	...	1	...	...	4	2	6
Other Diseases of Respiratory System	...	...	...	...	...	...	...	...	...	...	2	...	5	1	2	...	...	11	2	13
Quinsy	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1
Oesophageal Stricture	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1
Ulcer of Stomach	...	...	...	...	...	...	...	...	...	2	1	1	...	...	...	...	...	4	2	6
Other Diseases of Stomach	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	5	8
Enteritis	8	5	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9	6	15
Appendicitis	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	4	5	9
Obstruction of Intestine	3	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	9	8	17





TABLE IV.

Deaths from all causes in 1908 separated into age-groups.

CAUSES OF DEATH.	AGE AT DEATH.																TOTAL.		TOTAL.
																	Males.	Females.	
	0-1	1-2	2-3	3-4	4-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65	65-75	75-85	85 and upwards			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Accidental ( <i>contd.</i> )—																			
Suffocation, otherwise	2	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	3	
Falls	...	...	...	...	...	...	1	...	...	...	...	2	3	1	...	...	9	12	
Weather Agencies	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	2	...	
Otherwise	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1	
Homicidal	1	...	...	...	...	1	...	...	1	...	...	1	...	...	...	...	3	2	
Suicidal—																			
Poisoning	...	...	...	...	...	...	...	...	...	1	...	1	...	1	...	...	3	1	
Asphyxia	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	2	...	
Hanging	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	...	5	1	
Drowning	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	
Shooting	...	...	...	...	...	...	1	...	...	...	...	1	...	...	1	...	5	...	
Precipitation from Elevated Places...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	
Other Ill-defined and not Specified Causes	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	1	2	
Total	176117	42 32	17 12	10 8	8 9	21 15	8 8	10 13	13 14	54 39	71 73	91 99	134 108	135 193	118 169	29 53	937 962	1899	

The 52 deaths in the Asylum are not included in above table.





TABLE VI.

DEATH-RATES FROM PRINCIPAL DISEASES PER 100,000 OF POPULATION.											DEATHS UNDER ONE YEAR OF AGE PER 1,000 BIRTHS REGISTERED.
Year.	Population.	No. of Births.	Birth rate per 100,000.	No. of Deaths.	Death rate per 100,000.	Enteric.	Diarrhoea.	Phthisis.	Pneumonia. Broncho- Pneumonia and Bronchitis.	Other Tubercu- lar Diseases.	
1854	68993	2321	3364	1606	2328	—	—	—	—	—	—
1855	70173	2189	3119	1589	2264	—	—	—	—	—	—
1856	71374	2458	2736	1376	1928	—	—	—	—	—	—
1857	72595	2234	3077	1466	2019	—	—	—	—	—	—
1858	73837	2295	3108	1757	2380	—	—	—	—	—	—
1859	75101	2297	3059	1711	2284	—	—	—	—	—	—
1860	76386	2263	2963	1651	2161	—	—	—	—	—	—
1861	77693	2367	3047	1582	2036	—	—	—	—	—	—
1862	78874	2455	3112	1652	2094	—	—	—	—	—	—
1863	80073	2512	3137	1770	2210	—	—	—	—	—	—
1864	81290	2542	3127	1849	2275	—	—	—	—	—	—
1865	82526	2578	3124	2155	2611	—	—	—	—	—	—
1866	83781	2754	3287	1886	2251	—	—	—	—	—	—
1867	85054	2686	3158	1872	2201	—	—	—	—	—	—
1868	86347	2680	3104	1771	2051	—	—	—	—	—	—
1869	87659	2750	3137	1804	2058	39	147	600	—	—	—
1870	88878	2829	3183	2121	2386	40	111	663	—	—	180
1871	90345	2747	3041	2037	2255	38	155	605	—	—	168
1872	91684	2803	3058	1912	2085	27	143	599	—	—	168
1873	93041	2779	2987	1744	1874	33	91	513	—	—	139
1874	95297	2819	2958	1949	2045	34	78	619	—	—	144
1875	97005	2868	2956	2180	2247	26	104	730	—	—	177
1876	98746	2021	3059	1977	2002	14	76	530	—	—	152
1877	100510	3017	3074	1915	1905	18	80	230	310	—	148
1878	102320	3085	3015	2203	2153	16	107	225	442	—	173
1879	104150	3143	3017	1997	1917	10	42	214	425	—	130
1880	106200	3228	3040	2106	1983	21	127	192	314	—	155
1881	107934	3301	3058	2059	1908	42	48	183	317	—	128
1882	108680	3284	3022	2372	2183	25	61	209	381	—	187
1883	109426	3236	2957	2131	1948	25	96	192	383	—	160
1884	110180	3252	2952	2060	1870	14	80	195	376	—	162
1885	110938	2981	2687	1952	1720	16	32	191	376	—	132
1886	111704	2957	2647	1986	1778	12	84	195	346	—	160
1887	112473	3038	2701	1988	1768	12	95	178	328	—	148
1888	113248	2791	2465	1928	1703	13	54	153	311	65	149
1889	114029	2964	2600	1833	1608	16	56	178	255	67	131
1890	114814	2915	2539	2232	1944	11	82	192	363	86	164
1891	115606	3031	2622	2097	1814	11	41	143	330	81	137
1892	116780	2958	2523	2232	1911	7	58	141	337	79	151
1893	117520	2981	2537	2165	1842	13	74	168	292	88	169
1894	118260	3055	2589	1943	1643	9	44	152	265	87	137
1895	119010	3057	2575	2250	1891	12	86	167	345	74	164
1896	119760	3025	2526	1975	1649	12	61	150	250	66	124
1897	120510	2986	2478	1823	1513	17	91	142	203	47	144
1898	121270	3035	2503	2057	1696	15	105	136	209	65	179
1899	122040	3058	2506	2322	1903	20	155	146	270	28	173
1900	122860	2920	2376	2209	1798	10	76	139	274	47	166
1901	123668	2984	2413	2025	1638	5	91	134	227	59	162
1902	124539	3072	2468	1975	1586	11	39	139	246	40	125
1903	125405	3046	2429	1769	1411	3	40	145	190	52	114
1904	126286	2963	2347	2060	1631	5.5	43	136	236	67	133
1905	127183	2901	2281	1696	1334	1.6	35	135	177	54	102
1906	128095	2853	2227	1861	1453	2.3	55	144	204	58	111
1907	129023	2710	2100	1895	1469	2.3	33	141	228	53	111
1908	129967	2809	2120	1951	1472	3.8	23	126	223	44	104





**Annual Report**  
ON THE  
**MEDICAL INSPECTION, &c., of**  
**SCHOOL CHILDREN**  
OF THE  
COUNTY BOROUGH OF BRIGHTON  
*FOR THE YEAR 1908.*

BY  
DUNCAN FORBES, M.D., B.Sc., D.P.H.,  
*School Medical Officer,*

AND  
J. LAMBERT, M.D., B.A.,  
*School Doctor.*

---

BRIGHTON :  
KING, THORNE & STACE, JUBILEE STREET.

**1909.**





## GENERAL REVIEW OF THE PRINCIPAL DETAILS IN CONNECTION WITH ELEMENTARY EDUCATION IN THE DISTRICT.

The Borough of Brighton has a population, estimated for 1908 to be 129,967. The area of the district is 2,620 acres.

There are 32 schools, including one special children's school for mentally defective children. In these schools there are 79 departments. The number of provided schools is 17 (with 45 departments), and the unprovided schools 15 (with 34 departments).

The following table shows the chief factors in regard to attendance, &c., during 1908.

Accommodation	...	19,489
No. on Registers	...	18,004
Average attendance	...	16,134
% attendance	...	89.6

Percentage of the average number of children on register to the population, 13.8.

The number of children in the elementary schools, arranged according to age grouping, was, in 1907:—

Boys	...	...	—	—	5,211	75	5,286
Girls	...	...	—	—	4,870	74	4,944
Mixed	...	32	52		1,390	10	1,484
Infants	...	336	1,174		4,904	—	6,414
		368	1,226		16,375	159	18,028

Out of 32 schools with 79 departments, 23 have weighing machines and height standards.

In Circular 596, the Board of Education has indicated the scope and form of annual reports on school hygiene, and in order that the Brighton reports may be easily comparable with those of other towns, and with each other, the form prescribed has been carefully followed. Seeing that this is the first annual report, it has been considered advisable to treat each subject in much greater detail than will be necessary in future years.

(a) The hygienic conditions prevalent in the schools are on the whole good. It is intended to report upon schools requiring extensive structural alterations only at considerable intervals, so that an opportunity may be given for immediate action to be taken without overburdening finances at any one time. In December a full report was made regarding the Richmond Street and Sussex Street Schools, and certain recommendations were made.

(b) The arrangements made for the correlation of the Public Health Service and School Medical Service are satisfactory. The present Medical Officer of Health, on appointment, was made Chief Medical Officer to the Education Committee, and was required to supervise all medical assistance needed to carry out medical inspection under the Education (Administrative Provisions) Act, 1907. These duties were practically synonymous

with the duties of the School Medical Officer as defined in Circular 596, and the Medical Officer of Health is now recognised as such by the Board of Education. By having one person guiding both services all friction and duplication of work are avoided, and the experience and time of the Sanitary staff is available for school work.

The time given by the staff of the Public Health Office is occupied (1) in the making of inquiries and in the taking of action to prevent the spread of the exanthemata, (2) in the inspection of school buildings, and (3) in the carrying out of the provisions of the Employment of Children Act, 1903, and the Prevention of Cruelty to Children Act, 1904.

Dr. Eves, a part-time medical officer, examines the mentally defective children and advises as to their education. He also examines teachers, pupil teachers, and other officers of the Education Authority when required to do so. His report regarding these matters is embodied in those pages.

The great bulk of the work falls to the School Doctor, two school nurses, and a lady clerk; these devote their whole time to school work.

The School Doctor commenced work in May, 1908; the first school nurse, designated a School Attendance Officer, in September, 1904; the second school nurse in September, 1908; the lady clerk in July, 1908.

The School Doctor's time is, to a great extent, occupied by the work of medical inspection of school children, the examination of applicants for free meals, the school clinic, and the supervision of the work of the school nurses.

The duties of the nurse first appointed are confined to the supervision of the cleanliness of school children, to the home treatment of certain cases of neglected skin diseases, and to attendance at the skin clinique, held weekly. This branch of the work has been in working order for  $4\frac{1}{2}$  years.

The second school nurse assists in the actual work of inspection, weighing and measuring, the testing of vision in some cases, and the dressing and undressing of children. She also periodically visits those cases requiring treatment, and gives advice in accordance with instructions given by the School Doctor, and sees that these are followed out. She also makes enquiries into such cases as require further investigation, and as to home circumstances.

The lady clerk takes notes during the inspection, and carries out certain clerical work in connection with this branch. This appointment has led to a great saving of the School Doctor's time, and consequently to the more rapid examination of children and a lessened period of time spent in the school. The inspection can be completed in about half the time it would take if no such assistance were given. By the appointment of a female the objection of some parents to the examination of older girls in the presence of a male clerk is overcome.

During the inspection, assistance is also given by the head teacher, or by one of his assistants. Such help, especially for the purpose of maintaining order, and for the dressing and undressing of the smaller children, saves a considerable amount of time, and has been readily given, without exception, in every school in Brighton. The assistance given by attendance officers is chiefly in the enquiry into the social and economic circumstances of the parents of those children requiring free meals, clothing, &c.; cases of non-notifiable disease occurring among school



children are also notified by them to the Medical Officer of Health. They also bring to the notice of the School Doctor cases absent from school owing to sickness; such cases, in the absence of a medical attendant, and on the inability of the parents to obtain medical assistance, are investigated for the School Attendance Committee. Cases in which there is reason to suspect neglect or cruelty are referred by the attendance officers to the N.S.P.C.C.

During the year 1908, a certain amount of assistance has been given by voluntary medical helpers desirous of obtaining a knowledge of the routine.

*The routine of Medical Inspection.*—Notice is first sent to the head teachers of each department of the school, of the approaching inspection. During the last year a personal visit was made by the School Doctor to each department, and an explanation of the scheme of inspection was given. The teacher was asked to fill up part of the schedule card for each child to be examined. In each case entries were to be made under the following headings: Name of child, Date of birth, Age, School, Standard, Attendance, Cause of irregularity of attendance, Speech, Mental capacity, Teacher's remarks. Instructions were given as to the filling up of these entries in accordance with the terms of the Board of Education. In some schools the instructions were not strictly adhered to, with the result that the returns were, for statistical purposes, somewhat inaccurate; this was doubtless due to the lack of definite printed instructions and to the novelty of the work. During the forthcoming year printed instructions will be sent for purposes of reference in case of doubt.

A suitable date was fixed for inspection; the number of hours or days for the inspection was based on the approximate estimation of the number of children to be examined. For the examination of 60 children a full session of three hours in the morning was taken, while during the afternoon session of from two to two and a half hours, 30 to 40 children were examined on an average. Until the routine of the inspection was in working order, this number of children could not be examined, but with better organisation it was found that, on the average, from three to four minutes for each child was sufficient [*c* (vi.)]. The presence of parents, the dressing and undressing of young children, and the presence of defective conditions were the chief factors lengthening the period of inspection. The time taken for older children is, notwithstanding the additional examination of hearing and vision, slightly shorter than that required for infants. The greatest delay occurs in testing the vision of children of six and seven, many of whom can be persuaded to read the letters of a test type only with some difficulty. They frequently require the individual letters to be pointed to before any response is obtained.

Those cases in which some serious defect or disease was discovered were not closely examined in school, but were referred for further examination at the Public Health Office, the parents being requested to attend at the same time.

The actual inspection is carried out as follows:—All children are told to remove their boots, and the boys are stripped to the waist. They are then weighed and measured by the nurse; and after putting on their boots they are inspected according to the schedule card, the points requiring attention being noted by the clerk at the dictation of the School Doctor.



They then dress, their visual power is examined by Snellen's test types at a distance of six meters. Each eye is examined separately, and then the visual power of both together is ascertained. A convex lens of + 1 is then placed before one eye, the other being covered, and the vision re-tested. This is done in all cases to ascertain if any hypermetropia exists. If the vision is defective, each eye is tested separately with + 1 and - 1 lenses, and any improvement with these is noted. Occasionally the test card for astigmatism is used for older children in cases in which it is suspected that such exists. The children then return to their class rooms; the average time they are away is from 15 to 30 minutes.

Hearing is tested by means of a watch, each ear being tested separately, and the distance at which the watch is audible is noted. Cases shewing considerable deafness are re-tested with the forced whisper test.

After the inspection, the parents of children found to be defective in any way are notified of the defect or disease, and advised to seek treatment from their usual medical attendant.

#### FORM 5 M.I.

*Education Committee for the County Borough of Brighton.*

---

DEAR SIR (or MADAM),

Your child has been medically examined and is found to be suffering from

You are therefore advised to see your Medical Attendant in order that this condition may be treated.

Yours faithfully,

J. LAMBERT,

*School Doctor.*

If any condition requiring further examination has been found, the parents are requested to attend at the Public Health Office with their child. After such re-examination, advice is given as to the precautions to be taken, and the necessity or otherwise of obtaining treatment. The re-examinations usually made are in cases of heart and lung diseases, diseases of the nervous system, and errors of refraction.

	I.	II.	III.	IV.	NAME
Age    ...    ...    ...					
Address        ...    ...					
School ...        ...    ...					
Standard        ...    ...					
Attendances last Quarter.					
Suggested cause of Irregularity.					
Mental Capacity ...					
Speech ...        ...    ...					
Teacher's Remarks.					
Teacher        ...    ...					
Doctor's Remarks.					
Action Recommended.					
Action Taken        ...					
Doctor ...        ...    ...					

DATE OF BIRTH

# THE SCHEDULE OF INSPECTION.

c (i.) The schedule of the Board of Education has been closely followed, but in a few items there has been an alteration in detail.

The schedule is as follows:—

				I.	II.	III.	IV.
Date Inspection ... ..							
Clean- liness of	{	Clothing ..					
		Body ..					
		Hair ... ..					
Footgear ... ..							
Height... ..							
Weight ... ..							
Nutrition ... ..							
Girth Chest ... ..							
Nasal Obst. ... ..							
Mouth Breather ... ..							
Teeth ... ..							
Tonsils.. ... ..							
Glands	{	Ant. ... ..					
		Post ... ..					
Eye Disease ... ..							
Vision	{	Both ... ..					
		Right ... ..					
		Left ... ..					
Ear Disease ... ..							
Hearing ... ..							
Heart ... ..							
Lungs ... ..							
Nervous Syst. ... ..							
Tubr's. Rickets ... ..							
Deformities ... ..							
Vaccination ... ..							
Inf. Disease ... ..							
Other Disease ... ..							
Treatment ... ..							



The following are the chief points requiring explanatory notes.

The numbers referred to are those of the Board's schedule, Circular 582.

6. *Weight*.—In the case of boys, this has been taken with the child stripped to the waist, or with the coat and waistcoat removed, and without boots, not in "ordinary and indoor clothes" (Note 8, Circular 582). The weighing of girls was carried out with the boots only removed.
4. *Clothing and Footgear*.—Instead of noting the condition of these together, as in the Board's schedule, a separate record of each is made.
10. *Adenoids*.—A separate heading has not been provided, but where these are present a note has been made under the heading of tonsils.
10. *Submaxillary and Cervical Glands*.—The headings of Anterior and Posterior glands have been substituted, enabling the local cause or causes of glandular enlargement to be immediately seen, *e.g.*, enlargement of posterior glands generally indicates scalp affections (pediculi or impetigo of scalp), that of the anterior glands being generally due to carious teeth, enlarged tonsils, or adenoids.
- II. *Previous illnesses*.—These have not been noted, except when the parent was present at the inspection, and in some exceptional cases in which the previous history of the child was important.

All other headings correspond to those of the Board's schedule, but the following additional points have been included:—

1. *Girth of Chest*.—Taken during quiet respiration, just before the end of expiration.
2. *Vaccination*.—The number of cicatrices and their area are noted.
3. *Action taken*.—A special space has been left for recording this. The number of re-examinations made is noted, the number of visits paid by the school nurse and the treatment obtained.
4. *Teacher's remarks*.—A space has been provided in order that the head teacher may draw attention to any special defect which has been noticed in a child.

The schedules are printed on cards, 7 in. by 4 in., and these are kept on the card index system at the Public Health Offices. Supplementary cards are used for recording exceptional cases; cards for the examination of canteen cases are also kept. A list of children, with the defect or disease from which they are suffering, is forwarded to the Head Teacher of each department after the inspection.

In the case of children transferred from one school to another, a notification to that effect is sent to the Education Offices, together with a note as to the date of medical inspection of the child. The corresponding cards are then transferred to their proper places.

b (iii.). PRESENCE OF PARENTS AT THE INSPECTION.

A card is sent to the parent of each child who is to be examined from 1 to 3 days before the inspection.

FORM 3 M.I.

*Education Committee for the County Borough of Brighton.*

DEAR SIR (or MADAM),

The Medical Inspection of School Children will take place on \_\_\_\_\_, at \_\_\_\_\_

If you care to be present during the examination of your child \_\_\_\_\_ will you kindly attend at the School at the above time.

Yours faithfully,

J. LAMBERT,  
*School Doctor.*

As a consequence of this intimation, a small proportion of parents who object to the inspection keep their children away on the date mentioned. Very few send a note expressing a wish that the child shall not be examined. The proportion of these active and passive resisters varies considerably in different schools. No exact records were kept of these objections, but on an average the refusals were from 2-5 per cent. In one department of a better class school 25 per cent. of the children to be examined were either kept away or brought notes refusing permission for examination. This was the only instance of a widespread opposition.

In no case was a child examined if a note of protest had been sent. In some of those cases in which no evidence was forthcoming of an objection (except non-attendance at school on the date in question), the children were subsequently examined *without* further notice to the parent.

It is, however, certain that some children who most require medical attention, especially those habitually neglected, are kept away from the inspection. These cases generally, sooner or later, come to the notice of the School Doctor, especially at the skin clinique.

Another result of the notification to the parents is that the child is more or less cleansed, thereby defeating to some extent the object of inspection, as this cleansing is only of a temporary character. Certain stigmata, however, render the detection of such cases easy; and corroborative evidence is generally obtainable from the teacher.

The chief advantages derivable from the attendance of the parent are

1. The obtaining of the personal history of the child and its previous illnesses—an important point in some conditions;
2. The giving of advice to the parent regarding disease or defect;
3. The removal of that suspicion with which certain people regard any new procedure;
4. The help given in dressing and undressing children in Infants' Departments.

The disadvantages have already been recorded.

Altogether 1,120 parents or guardians attended out of 5,091 invited.

The percentage of parents attending the inspection averaged 22 per cent. The minimum attendance was 3 per cent.; the maximum 67 per cent. for any one school.



The attendance of parents was always highest in the infants' departments, next in the girls', while it was always very small in the boys' departments.

The co-operation of parents in the subsequent treatment was always asked for. Notification of the defect or disease, personal interviews, advice as to the necessity and means of obtaining treatment, periodical visits paid to the homes by the school nurse were the chief means employed to this end. The results of these efforts are discussed later under the heading of treatment.

#### *b* (iv.) DISTURBANCE OF SCHOOL ARRANGEMENTS.

A certain amount of time is taken in the filling up of schedules and arrangement of the children to be examined. If this clerical work be distributed among the assistant teachers, comparatively little time is occupied in the filling in of the details. More especially is this the case if ample notice be given of the date of inspection.

In all cases, after the explanation of our requirements, the Head Teacher was asked to mention the most convenient dates for inspection.

In 10 out of 32 schools the hall was used for inspection purposes, or a class was accommodated in the hall and the vacated class-room used. In two schools only was there a spare class-room constantly out of use. In two other departments the inspection was carried out in a large and well lighted corridor. In three departments the head teacher's room was used for this purpose. As a rule, these rooms are too small for testing vision in, and in the cases in which these rooms were used, it was at the express wish of the teacher. In all other departments it was necessary to use a cleared class-room. The dispossessed scholars were taken to another class-room, to another centre, to the playground, or to organised games.

The time spent in the inspection of a school varies naturally with the number of children to be examined. In the smaller schools, one morning or afternoon session was found to be sufficient, while in the larger schools, the inspection was spread over a period of three or four days. In the latter schools, the inspection of the boys' and girls' departments was always completed in two sessions, while in the infants' department, owing to the larger number there examined, three or four sessions were sometimes required. It may be taken as a general rule that during the year two routine inspections will be held in all the larger schools: this means some disturbance of the school routine on two to four days for each department during the year. The disturbance is for a short period and for a known time at the most convenient date.

It has been found possible in Brighton to make such arrangements in the schools that no urgent need for the provision of an inspection centre has arisen.

#### (*c*) EXTENT AND SCOPE OF MEDICAL INSPECTION DURING 1908.

##### *c* (i.) VISITS TO SCHOOLS AND DEPARTMENTS.

During the year all the elementary schools have been visited; every department (*i.e.*, 79 in number) has been inspected.

For the purpose of the routine inspection, 115 visits were made to the schools.



17 schools were visited for the inspection of children for the Canteen Sub-Committee, the total number of visits made for this purpose being 77. The number of children requiring free meals in the other 15 schools was so small that no visits were made to these schools, the children being sent down after school hours to the Town Hall for examination.

The total number of visits made to the 32 schools was 274: this includes visits to the special school for inspection purposes, but not for the purpose of attending the skin clinic.

*c* (ii.) THE SELECTION OF CHILDREN FOR INSPECTION.

The following groups of children were selected for inspection during 1908:—

1. Those entering the school since January 1, 1908 (Section 13, Education Act, 1907).
2. Those aged 13 and over. No child leaves school at an earlier age in Brighton. (Section 12, Circular 576.)
3. Those children suspected or known to be in any way physically or mentally defective, or suffering from any disease.

The selection of the last group was left to the discretion of the head teacher. The number brought up for examination in connection with this group was naturally very variable. In the smaller schools, where more individual attention can be given to the children by the head teacher, a relatively larger proportion was picked out, while in some of the larger schools, where many children were undoubtedly defective, a very small proportion was selected. With an increasing knowledge of defective conditions there is but little doubt that the number selected in this group will increase. Accurate observation should detect at least 75 per cent. of the defective children.

THE NUMBER OF CHILDREN INSPECTED.

The following table shows the number of children classified according to age and sex, examined in the routine inspection during 1908.

<i>Age.</i>	<i>Male.</i>	<i>Female.</i>	<i>Total.</i>
3	134	93	227
4	293	268	561
5	334	318	652
6	172	233	405
7	148	174	322
8	183	150	333
9	126	135	261
10	120	115	235
11	90	131	221
12	126	118	244
13	763	696	1459
14	78	59	137
15	10	—	10
16	—	1	1
	<hr/>	<hr/>	<hr/>
	2577	2491	5068
	<hr/>	<hr/>	<hr/>

*c* (iii) The total number of examinations made, including special examinations, re-examinations, and canteen examinations, was 7,333.

It will be seen from the above table that the largest number of both male and female children were in their thirteenth year. Owing to the variable age at entry, from three to five, the numbers occurring in these separate years are fewer. The children examined in the intermediate years are chiefly those selected for special reasons (*e.g.*, defects, &c.), or are those entering the schools after completing part of their school career in other schools or districts. This point should be borne in mind in estimating the value of statistics referring to disease at certain age periods.

The statistics at three, four, five and at thirteen give averages for normal children; at other ages this is not so.

#### CANTEEN INSPECTIONS.

The total number of inspections made for the Canteen Sub-Committee during 1908 was 2,006. Altogether, 1,673 children were examined in this connection.

#### SPECIAL EXAMINATIONS.

A certain number of children were sent to the Public Health Office for special examination at the request of the School Attendance Sub-Committee, the Head Teachers, or the Attendance Officers. The number of such examinations made was 31.

A considerable number of children were also re-examined periodically, apart from those inspected in the routine examination of the schools. Of these children 73 re-examinations were made.

#### *c* (iv.) CHILDREN REFERRED FOR SUBSEQUENT OR FURTHER EXAMINATION.

Re-examination of children seen previously in the routine inspection is generally required for the closer investigation of heart and lung disease, diseases of the nervous system, deformities, and for certain eye diseases or errors of refraction. These cases are re-examined and kept under observation while attending at school. The number of re-examinations thus made was 155. Of these cases 122 were re-examined once, 10 twice, three three times, one four times.

The number of children re-examined was 136, *i.e.*, a percentage of 2·7 of the total examined in the routine inspection.

#### *c* (v.) STATEMENT OF THE CHIEF DEFECTS DISCLOSED BY INSPECTION.

A short summary is given in the following table of the defective conditions in which treatment was considered necessary, and in which advice was given to that effect. This table is based on statistics derived from the inspection of 5,091 children.



<i>Defect or Disease.</i>	<i>No. of Children.</i>	<i>Percentage of Total Examined.</i>	
Enlarged tonsils and adenoids	330*	...	6·5
Defective vision ... ..	392	...	7·7
Deafness and Otorrhœa ... ..	115	...	2·2
Skin diseases ... ..	105	...	2·1
Eye diseases ... ..	38	..	·7
Defective teeth, requiring im- mediate treatment ... ..	38	...	·7
Tubercular diseases ... ..	23	...	·4
Other conditions ... ..	331	...	6·5
Mouth breathers ... ..	524	...	13·0
Mental deficiency ... ..	15	...	·3

The total number of defects found in 5,091 children was 1,983, *i.e.*, a percentage of 39 (exclusive of mouth breathers the percentage is 28). It should be remembered that one child may have more than one defect, *e.g.*, it may have both deficient hearing and defective vision. The percentage based on the number of defective children (1,843) is 36 (exclusive of mouth breathers the percentage is 26).

In the above table only the more serious defects have been included. This is especially so in regard to visual defects, enlarged tonsils and adenoids. The cases in these two groups were all urgently in need of treatment. Children with defective vision were suffering from eye strain or strabismus, or had vision of 6/18th or less, reading with both eyes. In view of the congestion of the ophthalmic departments of the hospital, it was thought advisable to limit the cases seeking treatment to the above groups. The cases in which treatment was advised for enlarged tonsils and adenoids were those in which there was considerable hypertrophy of the tonsils and postpharyngeal lymphoid tissues, associated with secondary lesions, *e.g.*, maldevelopment, enlarged glands of neck, a considerable degree of mouth breathing, neurosis, or defect of speech, &c.

In the group of skin diseases the chief conditions requiring treatment were impetigo, eczema, and ringworm. Many of the cases with heart disease simply required advice as to general hygiene and the treatment of possible rheumatic manifestations.

As will be seen from a succeeding table, many children with minor defects were found requiring advice only ; in some it was not deemed necessary to draw attention to the condition.

The incidence of verminous conditions is not mentioned in the above table, since the results of a detailed enquiry into this is given in a subsequent paragraph.

Only a small proportion of those suffering from carious teeth was recommended to seek treatment ; had all the cases requiring such treatment been advised to procure it, the dental departments of the hospitals would have been overcrowded, since in many cases conservative rather than radical measures were necessary.

It will be seen that 13 per cent. of the children examined were mouth breathers ; the causes of this condition are discussed later.

The cases of mental deficiency do not include those already in the special school.

A more detailed account of the above conditions will be found in succeeding paragraphs.

### *c* (vi.) THE TIME OCCUPIED FOR INSPECTION.

The average time per head for inspection has been given in a preceding paragraph as from 3-4 minutes. This is the time actually occupied in inspection, as apart from such time as is taken for dressing, &c. The weighing and measuring takes from  $\frac{1}{2}$ -1 minute, the medical inspection from 2-3 minutes, and the testing of vision up to 5 minutes.

---

\* In 87 other cases enlargement of the tonsils was found, but operative treatment was not recommended.



This allowance means that about 80-90 children can be inspected daily, if the organisation is good.

The factors on which this depends have already been discussed.

The actual time occupied by medical inspection may seem very short, but it is to be noted that many of the entries on the schedule card can be made from simple and accurate observation alone, and if these entries are made by a clerk, the time necessary for recording them is very short. Again, accurate observation eliminates many of the defects or diseases to which children are liable, before any physical examination is made to confirm this, and as soon as the eye has been trained to observe in a routine manner such details as are necessary, still further economy of time results.

(d) GENERAL REVIEW OF THE FACTS DISCLOSED BY MEDICAL INSPECTION.

*Mental Capacity.*—The entries under this heading were filled up by head teachers, who are, generally speaking, better able to form a correct judgment than the medical inspector, unless a considerable amount of time be spent by the latter. One may take it for granted that every backward and mentally defective child is noted by the teachers as such.

The succeeding table shews the number and percentage of children arranged according to mental capacity. It is based on statistics derived from 31 schools in the examination of 4,434 children, and does not include 48 children attending the special school for mentally defective children.

<i>Mental Capacity.</i>			<i>No. of Children.</i>			<i>Percentage.</i>	
Bright	...	...	...	1782	...	...	40·2
Fair	...	...	...	1769	...	...	39·9
Dull	...	...	...	617	...	...	14·0
Backward	...	...	...	236	...	...	5·3
Mentally Deficient	...	...	...	30	...	...	0·6
Imbecile	...	...	...	0·0	...	...	0·0

From this it will be seen that 80 per cent. of the children fall within the first two groups, and that they are equally divided in these groups. The children in the dull and backward group form just under 20 per cent., and the mentally defective children ·6 per cent. only.

The 30 children believed to be mentally deficient were examined specially, and of these 15 were considered defective enough to receive special education. This lowers the percentage of this class of case to ·3.

There are therefore at present 63 school children known to require education at a special school. 63 represents only ·35 of the total school population. Judging from other statistics, it is probable that Brighton will have to provide in the near future for a larger special school, where over 100 children can be accommodated. Provision will also have to be made for classes for dull and backward children, this group requiring more individual attention and a different curriculum. Such classes might conveniently be established in schools in which the accommodation is too large for the number of children attending at present.

*Speech.*—The entries under this heading are also filled in by head teachers. Cases in which a defect is noted are subsequently investigated.

In the examination of 5,046 children in the elementary schools, noticeable defects of speech were found in 196, *i.e.*, just under 4 per cent. In 50 per cent. of these cases there was either stammering or stuttering.

The other cases were due generally to some defect of articulation or phonation. A considerable number were associated with enlargement of the tonsils, adenoids, or malformation of the palate. In certain of these cases advice was given as to surgical treatment; in the remainder, especially for stammerers and stutterers, general advice on the management of the vocal and respiratory system was given to the pupil and teacher. At present no special classes have been formed for such children.

In the special school for defective children, 20 out of 46 examined, *i.e.*, 43 per cent. were found to have defective speech. Especial attention is given to voice production and articulation by the teachers in the special school, defective speech being a frequent concomitant of mental deficiency.

*Deaf and Dumb Children*—Four cases of Brighton school children are at the residential local institution for the Deaf and Dumb.

*Anthropometric Measurements*.—The only measurements taken were those of height, weight and girth. The method of taking these has already been described.

The following table shews the average height, weight and girth of 5,068 children; 2,577 boys, and 2,491 girls were examined. The measurements are given in English and metric systems:—

<i>Boys.</i>							
Age.	No. Examined.	Average Weight.		Average Height.		Average Girth.	
		kgms.	lbs.	cms.	ins.	cms.	ins.
3	134	14·6	32·2	92·5	36·4	50·5	19·9
4	293	15·6	34·4	97·6	38·4	51·6	20·3
5	334	16·4	36·2	103·9	40·9	52·8	20·8
6	172	18·6	41·0	109·2	43·0	54·3	21·4
7	148	20·3	44·8	115·8	45·6	56·1	22·1
8	183	21·9	48·3	118·5	46·7	57·8	22·8
9	126	24·5	54·0	126·1	49·6	59·6	23·5
10	120	26·3	58·0	128·6	50·6	61·1	24·0
11	90	29·1	64·2	134·7	53·0	63·5	25·0
12	126	31·0	68·5	138·1	54·4	64·6	25·4
13	763	34·2	75·4	144·1	56·7	67·2	26·4
14	78	38·7	85·3	150·6	59·3	69·4	27·3
15	10	36·4	80·3	146·6	57·7	68·5	26·9

<i>Girls.</i>							
Age.	No. Examined.	Average Weight.		Average Height.		Average Girth.	
		kgms.	lbs.	cms.	ins.	cms.	ins.
3	93	14·3	31·5	91·4	36·0	49·6	19·5
4	268	15·4	34·0	97·1	38·2	50·4	19·8
5	318	16·8	37·0	103·1	40·6	51·5	20·3
6	233	18·2	40·1	108·2	42·6	52·6	20·7
7	174	19·9	43·9	113·8	44·8	54·3	21·4
8	150	22·7	50·0	120·5	47·4	55·8	21·9
9	135	24·3	53·6	124·8	49·1	57·2	22·5
10	115	27·2	60·0	130·4	51·3	59·4	23·4
11	131	28·9	63·7	138·1	54·3	61·0	24·0
12	118	32·8	72·3	140·1	55·1	63·7	25·0
13	696	36·1	79·6	145·4	57·2	67·2	26·4
14	59	40·1	88·4	150·6	59·3	69·6	27·4
16	1	31·0	68·3	134·5	52·9	62·0	24·4



For the purpose of comparison, the following tables, given by Dr. Clement Dukes, are inserted. The first table shews the average height and weight of boys between 10 and 14 of the artisan class (town population); the weight includes clothes of 9 lbs.—in the Brighton table the weight of clothes for the boys may be taken as 2·3 lbs.

Boys of Artisan Class.					Public School Boys.			
Age.		Height in inches.		Weight in lbs.			Height in inches.	Weight.
10	...	50·5	...	66·3	...		53·4	67·4
11	...	51·5	...	69·4	...		54·9	72·9
12	...	52·9	...	73·6	...		56·9	80·3
13	...	55·9	...	78·2	...		58·7	88·6
14	...	57·7	...	84·6	...		61·1	99·2

On comparing the statistics in these tables, it is found that the average height and weight (allowance being made for clothes) of the Brighton schoolboy is considerably above the average given for boys of the artisan class, but is well below those of the public schoolboy group; practically the difference in the latter case may be represented as one year's growth, *i.e.*, the public schoolboy of 12 is the equal in height and weight of the elementary schoolboy of 13.

It has not been found possible to give comparative tables for girls.

To which of the many factors concerned in the development of physique, the superiority in measurements, of the Brighton boy over the boy of the artisan class, is due, it is difficult to state. In Brighton, there exists relatively a considerable number of the fair-haired type of child; this may partly account for the difference. Moreover, the systematic feeding of those children needing meals, which has been regularly carried out since 1898, must help to raise the standard of physique among the poorer children. Naturally, differences in these measurements exist within the different schools of the Borough. Where the environment of a school is poor, the children of the poorer classes form the larger number of those attending that school, and *vice versa*. As the small numbers obtained from measurement in individual schools do not make for statistical accuracy, the records from six of the poorer schools (group B) have been collected and compared with those from four of the better class schools (group A), the numbers on which the statistics are based being about equal in both groups. These records are only given for school-ages at most of which a considerable number of children were examined. The following table shows this comparison:—



Age.	Boys.				Girls.			
	Group A.		Group B.		Group A.		Group B.	
	Weight.	Height.	Weight.	Height.	Weight.	Height.	Weight.	Height.
3	14·8	90·9	14·2	90·3	15·8	97·6	13·9	89·5
4	16·3	102·0	15·4	95·9	15·8	99·7	15·3	94·8
5	17·8	105·8	16·5	101·4	17·5	105·4	16·3	101·9
6	18·7	109·7	17·6	106·8	18·3	108·6	18·4	107·3
7	20·7	118·6	19·6	113·6	21·2	114·8	20·4	110·9
8	23·1	123·2	20·7	110·9	22·5	122·1	22·3	119·0
9	25·3	127·6	23·2	121·7	26·1	127·9	24·8	124·2
10	28·1	132·8	25·3	127·0	27·6	133·2	25·7	124·4
11	29·5	135·4	28·0	133·7	30·7	154·0	26·9	130·8
12	32·9	142·1	31·3	135·0	33·2	140·8	33·1	141·7
13	35·8	147·3	33·4	141·8	36·1	147·6	35·5	142·9
14	39·3	151·4	35·0	146·5	40·5	153·1	32·2	138·6

There is thus a difference at each age in the weights of boys of the two groups, which average 1-2 kilogrammes or 2½ to 4½ lbs. Among girls the difference is not so marked, being generally about 1 kilogramme or 2·2 lbs. The statistics given shew some variation from these figures, but, taken as a whole, they shew well the superiority of the physique of children of a higher social grade.

As a means of estimating “nutrition” apart from “physique,” the relation of weight to height has been employed. In order to do this a table must be constructed shewing the average weight at a definite series of height measurements. This has been done for 5,068 Brighton children. The next table shews these measurements at certain heights—the complete table being too long for publication. Such a table is of great assistance in determining if a child is poorly nourished; and this provides a quick method of distinguishing whether or not it requires free meals. A child which is not up to the proper weight for a certain height is more in need of feeding than is a child below *both* weight and height standard for its age, but with an average height-weight ratio; the latter child is well nourished, and its deficiency in general physique is often due to other causes than improper or insufficient food.

<i>Boys.</i>		<i>Girls.</i>	
<i>Height in cm.</i>	<i>Weight in k.</i>	<i>Height in cm.</i>	<i>Weight in k.</i>
90	14·1	90	14·0
95	14·8	95	14·9
100	15·7	100	15·8
105	17·0	105	16·9
110	18·5	110	19·0
115	20·4	115	20·6
120	22·0	120	22·4
125	24·1	125	24·3
130	26·4	130	26·0
135	29·0	135	28·6
*140	31·4	140	32·3
145	34·2	145	35·5
150	37·4	150	39·4
155	40·5	155	42·6
160	44·9	160	46·8

\*At this point the influence of puberty on the weight of the girl begins to be prominent, the increase in weight continues to the end of the table.

## CLEANLINESS, &amp;c.

(4) *Clothing*.—The condition of the clothing is an index primarily of the social status, and secondarily of the economic conditions under which the child is living. It is of interest from the medical point of view, inasmuch as neglect of cleanliness, &c., goes hand in hand with neglect of the body. In the examination of 5,091 children, it was found that 61 per cent. were well and sufficiently clothed, 31 per cent. were only moderately clothed and eight per cent. were very badly clothed.

(4) *Footgear*.—60 per cent. of the children examined had fairly good boots, 27 per cent. moderately good footgear, and in 13 per cent. the condition was bad.

There are at present several voluntary agencies by which children with inadequate clothing and footgear are provided with a suitable outfit. The Education Committee controls the "Tindal Robertson Boot Fund" for the provision of boots for poor children, while the Fund originated by the Brighton Police for providing complete outfits of clothing and footgear is in every way a great help to parents of the poorer classes. From the latter fund, 804 children have been thus equipped during this present season; the scheme however extends further than this, since deserving children on leaving school are given suitable outfits for the position which they intend to take up. This is of especial value with regard to girls, many of whom cannot go out to service because of the ragged condition of their clothes.

The Children's New Year Boot Fund, controlled by Alderman Carden and a Committee, provides a great number of children with boots; it is a voluntary association. The parents contribute in some cases to the payment for boots. A certain number of children are provided with clothing by the Salvation Army Officers.

(8) *Body*.—In 53 per cent. of children the body was clean and free from signs of vermin. Thirty-four per cent. of children showed signs of vermin, as evidenced by a moderate amount of flea bites or other stigmata. The remaining 13 per cent. were badly bitten, and in the majority of these, vermin was actually present. 30 per cent. of this last class were very dirty and neglected, *i.e.*, four per cent. of the total.

In the above analyses the average figures for all schools have been given. In a few of the better class schools the general standard of cleanliness was very high, but in no school was it absolute. On the other hand, in many of the poorer schools a certain proportion of the children were kept very clean—a result very creditable to the parents, considering the constant exposure of their children to infection with vermin.

(8) *Hair*.—The condition of the hair was investigated in all cases. The results of this examination have been classified under various headings, and are shewn in the next table.

					<i>Boys</i> <i>per cent.</i>		<i>Girls</i> <i>per cent.</i>
Clean ...	...	...	...	...	80	...	47*
Nits, moderate		...	...	...	17	...	50
„ excessive		...	...	...	·1	...	·7
Lice ...	...	...	...	...	·1	...	·7
Seborrhea	...	...	...	...	2	...	1
Ringworm	...	...	...	...	1·2	...	·3
Impetigo	...	...	...	...	·1	...	·3



\* In the clean class have been included cases in which nits were very few in number. The number of cases in which nits and lice were present in large numbers was small; this is to be attributed to the periodical examination and supervision of the school nurse (Miss Payne). Notwithstanding this, it is a matter of serious moment that over 50 per cent. of the girls are infected with this parasite. The percentage among the boys is 17 per cent., a much lower figure; the infection chiefly being in the infants' departments. The elder boys are little affected except in some of the schools in poor neighbourhoods. The reason of the difference lies in the shortness and periodical cutting of the hair. A more detailed analysis of the incidence of this infection revealed the following points:—In one large school of the better class, in which 109 boys were examined (boys' and infants' departments), the percentage of clean heads was 96; in another (166 boys examined), 94 per cent. The corresponding figures for the girls were 76 per cent. and 72 per cent. (88 and 148 girls examined respectively). In one of the smaller better class schools (under 50 examined), the percentage of girls with clean heads was 97, of boys 91. In another small school 100 per cent. of the boys had clean heads. In a moderate sized school in a poor neighbourhood 57 per cent. of the boys and 94 per cent. of the girls were infected; in a much larger school 80 per cent. of girls were infected (138 examined). In the poorer schools practically always over 70 per cent. of girls were infected. The amount of infection is usually greater among the older girls, but this is not always so. If especial care is directed to the children of the girls' departments, a high standard of cleanliness may be reached. Thus, in one school receiving children of a mixed class, 75 per cent. of girls were found to have clean heads (120 examined in both girls' and infants' departments). In this same school a great deal of attention is paid to cleanliness in the girls' department, and out of 50 girls examined 84 per cent. had clean heads, *i.e.*, the percentage of clean heads was greater among the older girls than among the girls in the infants' department. This is unusual, the reverse generally being the case; the hair of the infant is shorter and more easily cleaned than that of an older girl. The standard of cleanliness in both departments was comparatively good.

From the above remarks these conclusions may be drawn:—

1. Infection with pediculi is widespread.
2. It is most noticeable in the schools of poorer districts, but no school is immune.
3. It is very marked in the girls' departments.
4. Boys' departments are relatively free.

In connection with this subject, the following statistics (furnished in a Report by Nurse Payne) are of interest. They show the extent of the work done in the supervision of cleanliness, verminous conditions and skin diseases in the elementary schools during 1908.



Table shewing *number of children under supervision* for various conditions :—

		<i>Boys.</i>	<i>Girls.</i>	<i>Infants.</i>	<i>Total.</i>
Verminous Heads	...	64	706	224	994
„ Bodies	...	93	180	80	353
Ringworm	...	55	33	110	198
Scabies	...	8	18	10	36
Eczema and Impetigo	...	23	97	110	230
Blepharitis	...	10	5	20	35
Other conditions	...	55	70	125	250
		<hr/> 308	<hr/> 1109	<hr/> 679	<hr/> 2096

*The number of examinations made were :—*

Verminous Heads	...	7,304
„ Bodies	...	3,525
Ringworm	...	218
*Eczema and Impetigo	...	610
Scabies	...	36
Blepharitis	...	107
Other conditions	...	1,942
Total	...	<hr/> 13,742

*Exclusion from school* was recommended in certain of these cases. The following table gives a summary of exclusions for various conditions :—

		<i>Boys.</i>	<i>Girls.</i>	<i>Infants.</i>	<i>Total.</i>
Verminous conditions	...	20	65	29	114
Scabies	...	8	18	10	36
Eczema and Impetigo	...	16	81	80	177
Ringworm	...	55	33	110	198
Other conditions	...	20	33	45	98
		<hr/> 119	<hr/> 230	<hr/> 274	<hr/> 623

The cases thus excluded were 623, *i.e.*, about 4 per cent. of the children attending school are excluded for a varying period during the year for verminous conditions or contagious skin diseases. Over 80 per cent. of the children so excluded are from the infants' and girls' departments. In cases of persistent neglect after exclusion proceedings are taken against the parent or guardians in a Court of Summary Jurisdiction. This action is based on the refusal of the parent to cause the child to be made fit to attend school. During 1908, such proceedings were taken in six cases; two warning notices had been sent, the second a fortnight to three weeks after the first. Fines were inflicted in four cases, and two of the cases were adjourned on promise of immediate treatment being instituted.

\*Certain of these cases were secondary to Pediculosis, p. 44.

The *effects of pediculosis* are well known—enlarged glands of the neck—abscess of the neck and impetigo of the scalp are the usual conditions met with. It only remains to say here that impetigo of the scalp associated with pediculosis, if efficiently treated, need not involve an absence of more than 1-2 weeks from school, whereas if not properly treated, the case may, and generally does, go on for months.

From the first table it will be seen that about 6-8 per cent. of the children came under the supervision of the School Nurse for verminous conditions during the year. When it is remembered that 33 per cent. of children attending all departments have been shewn by medical inspection statistics to be affected in some degree with verminous heads, it will be seen that the School Nurse must of necessity see only the worst cases. Fortunately, the majority of those infested with nits are more or less free from lice. This indicates that some home treatment, at least, is given.

Evidence given by caretakers of the schools leads us to believe that since the regular supervision of the School Nurse commenced there has been much less "free" vermin in the schools.

In three schools only is the hair of children in the girls' department plaited or folded back as a routine practice, and in those departments the percentage of clean heads is well above the average. It would doubtless lead to considerable improvement were this simple measure adopted in all girls' departments. In the smaller departments it should be possible to eradicate almost completely verminous conditions of the head by the combined aid of School Nurse and Head Teacher. A considerable degree of tact is required, however, to successfully deal with such matters, and many parents are only too ready to find insult rather than assistance in any attempt made to secure their co-operation.

At present the measures available for the prophylaxis and treatment of these conditions are:—

1. Medical inspection.
2. Supervision by School Nurse.
3. Plaiting, &c., of hair in the girls' departments.
4. Continuous and systematic instruction in personal cleanliness in the schools.

The two latter suggestions are worthy of more attention than they receive at present. If systematically carried out in every school, there is no doubt that a great lessening of verminous conditions would ensue.

(7) *Nutrition*.—As evidence of the general well-being of the community, and of the necessity or otherwise for the provision of free meals to school children, the statistics obtained in regard to nutrition are of value. The following table shews the nutrition of 5,091 children:—

Nutrition.					Per cent.
Good	...	...	...	...	71
Moderate	...	...	...	...	23
Poor	...	...	...	...	6

Taking the average number of children in attendance to be 16,000, the numbers of children falling within these grades would be:—

Good	...	...	...	...	11,360
Moderate	...	...	...	...	3,680
Poor	...	...	...	...	960

#### (10) DEFECTS AND DISEASES OF THE NOSE AND THROAT.

*Mouth Breathing*.—This, the most obvious defect, prevails to a large extent. In the examination of 5,091 children it was met with 889 times—the cases in which it was slight being ignored. This is equivalent to a



percentage of 17·4, *i.e.*, one child in every six is a mouth-breather. The next table shews the percentage incidence at different ages :—

Age.	No. of Children examined.	Percentage of Mouth-breathers.	Age.	No. of Children examined.	Percentage of Mouth-breathers.
3	227	8·3	9	266	21·4
4	570	14·5	10	236	24·1
5	654	17·2	11	220	17·3
6	401	18·9	12	244	23·0
7	326	21·4	13	1463	15·0
8	336	23·2	14	148	15·0

The incidence is seen to diminish materially after the age of 12; this is probably due to the better control over the “habit” exercised by the older children.

In a great number of these cases the condition is one of “habit,” there being no organic obstruction to nasal breathing. In a few the condition is a temporary one, due to blocking of the nasal passage by a “cold.” Adenoids—of varying degrees of severity—are responsible for most of the remainder. As will be seen in a subsequent paragraph, the percentage of cases with adenoids requiring surgical treatment was only 3·4. This leaves a percentage of 14, due to the above-mentioned causes chiefly. In view of the consequences of this condition—colds and bronchial catarrhs—a circular was sent round to the Head Teacher of each department, drawing attention to the need for supervision and systematic drill in breathing exercises; the reasons for this being briefly enumerated. Colds and bronchial catarrhs are responsible for a good deal of irregular attendance at school, hence any diminution of this habit will probably result in an improved attendance.

*Nasal Obstruction:* Complete nasal obstruction occurred in 29 cases, *i.e.*, 5 per cent.; in most cases this was due to an extensive growth of adenoids. Partial obstruction was found in 294 cases, *i.e.*, 6 per cent.; this was usually associated with a slighter grade of adenoids, with swelling of mucous membranes associated with catarrhs, or malformation of the septum nasi. In 2 per cent. of cases there was nasal discharge, and in ·2 per cent. a marked degree of deviation of the septum, traumatic in one instance only.

*Adenoids.*—In the investigation of this condition, digital examination of the nasopharynx was not resorted to, except in a few cases, hence the obvious cases requiring surgical treatment have been alone included under this heading. 176 cases were discovered, *i.e.*, 3·4 per cent.; these cases were recommended for operation. That a great deal of good and an improvement in physique will result from the treatment of cases operated on before secondary maldevelopment of the body ensues, there can be no doubt—but the operation must be followed by a systematic course of respiratory exercises, otherwise in many cases it is foredoomed to failure. The School Nurse advises the parents as to the necessity for this.

*Enlargement of the Tonsils.*—In 37 per cent. of the children examined there was a greater or less degree of enlargement. 29 per cent. of the cases shewed a slight enlargement only. In these no treatment was necessary or advisable. In 8 per cent. of the children (384 in number)



the tonsils were considerably enlarged. In about 75 per cent. of these last-mentioned cases operation was advised. In only 5·7 per cent. of the children examined was there excessive enlargement.

The grounds on which operation was advised were as follows:—

1. Association with adenoids.
2. Recurrent sore throats.
3. Enlargement of cervical glands.
4. Association with speech defects.
5. Excessive enlargement.

In view of the association of tuberculosis of the glands of the neck with enlargement of the tonsils, it is advisable that those children suffering from tonsillar enlargement with glandular changes should be subjected to operative treatment. The percentage incidence at various ages is shewn in the following table:—

Percentage incidence.			Percentage incidence.		
Age.	Slight enlargement.	Much enlargement.	Age.	Slight enlargement.	Much enlargement.
3	33·4	2·6	9	29·0	8·6
4	32·2	6·6	10	31·3	7·0
5	29·6	8·2	11	25·4	10·0
6	28·6	9·0	12	27·0	9·0
7	27·9	9·0	13	28·0	8·2
8	31·2	8·6	14	22·3	9·4

From this it will be seen that the incidence is much the same at all ages from 5-14. Children with normal tonsils form about 63 per cent. of the total.

#### OTHER CONDITIONS.

The following were met with: Granular pharyngitis, nasopharyngeal catarrh, both frequent; perforation of the fauces, 3; elongation of uvula, 4; bifid uvula, 12; cleft palate, 5; hare lip, tracheal fistula, nasal polypi, polyp of tonsil, chronic laryngitis, follicular tonsillitis, 1 case of each.

*Goitre* was met with in 4 cases; in each the condition was one of simple parenchymatous enlargement. Several cases of thyroid enlargement associated with puberty in girls were seen.

#### GLANDS.

1. *Anterior*.—In this group, the condition of the following sets of glands are included: Submaxillary, concatenate, superficial and deep cervical. The glands usually affected were the submaxillary and concatenate, indicating affections of the teeth and tonsils.

From the frequency with which dental caries and enlargement of the tonsils were found to exist, it is not surprising to find that in 89 per cent. of children there was some slight enlargement of these glands. In nine per cent. of children the glands were not felt, or if felt was not enlarged, while in just over one per cent. considerable enlargement existed (77 cases). In four cases of the latter group tuberculosis of the glands was diagnosed and in one case a tubercular sinus was present.

2. *Posterior*.—In ·3 per cent. only of the children examined were the glands considerably enlarged, and in these cases (18) the group involved was the suboccipital, the cause being impetigo of the scalp.

In 61 per cent. however the glands were definitely hard and palpable, the cause almost invariably being pediculosis.

### (9) TEETH.

The enumeration of carious teeth requires instrumental investigation, and if carefully done, almost doubles the length of time for inspection; hence, in the inspection during 1908, a classification (slightly modified) issued by the Dental Association has been adopted. Three groups of conditions are specified:—

- X. Teeth good; no marked loss of masticating power; caries not excessive.
- Y. Considerable loss of masticating power; all molars carious; generally other teeth also shew caries.
- Z. Teeth very carious; suppuration; and sinuses.

The following table shews the percentages in these groups at all ages:—

X.	79 per cent.	
Y.	20·3 per cent.	} 21 per cent.
Z.	·7 per cent.	

*i.e.*, the teeth in 79 per cent. are in fair or good condition; in 21 per cent. they are bad.

Two cases of dental cysts were found; one of gingivitis and one of stomatitis associated with carious teeth.

### (13) EAR DISEASE.

*Otorrhœa* existed, at the time of examination, in 97 children, *i.e.*, 1·9 per cent. This chronic suppuration was a sequel of acute otitis media following nasopharyngeal catarrh, commonly occurring during an attack of cold or of one of the exanthemata.

*Cerumen*.—In a few cases deafness was associated with a collection of wax in the ear.

*Furuncle*.—Two cases of boils in the external meatus were met with.

*Hearing*.—This was tested with a watch for each ear separately. The watch was easily audible to a normal ear at 36 inches.

The following table shews the results of these tests:—

Very Deaf	... 7 per cent.	(watch inaudible at 3 inches from each ear).			
Deaf	... 2·3	„	„	12	„ „ either.
Slightly Deaf	... 8·7	„	„	18	„ „ „

The common causes of deafness were:—

1. Cerumen.
2. Perforation of the tympanic membrane, with or without otorrhœa.
3. Adenoids, or throat deafness.

Of these, the last (in the absence of previous inflammation and destruction of the middle ear) is curable by removal of the adenoids. As a very considerable number of children with deafness have adenoids, it



is probable that, with operative measures, the amount of deafness among school children will decrease markedly in succeeding years.

(11) DISEASES OF THE EYE.

*Ciliary blepharitis* was found in 5 per cent. of cases. The most neglected cases of this disease are treated at the Clinic, or are sent to hospitals. In 12 out of the 258 cases styas were present.

*Conjunctivitis.* 26 cases (·5 per cent) were suffering from this disease. In 6 it was associated with phlyctenules.

*Nebulae.* 30 children shewed evidence of previous corneal ulceration, in one only was a leucoma present. Vision was affected to a greater or less degree in 21 cases.

*Corneal ulcers* were found in 6 children. The following also were noted :—

*ptosis*, 6 cases; *excision of globe*, 3; *nystagmus*, 4; *cataract*, 3; *blepharospasm*, 3; *heterochromidia iridis*, 3; *subconjunctival ecchymosis*, 2; *keratitis*, *coloboma*, *meibomian cyst*, *exophthalmos*, *subconjunctival lipoma*, *pannus*, 1 case of each.

*Vision.*—The method used in testing vision has already been described. Children under six were not tested, and it was found that a considerable number of those aged six either could not or would not read letters on the test type card. The number of children tested was 3,342, a percentage of 67 on the total inspected.

The next table shews a summary of the results thus obtained; the statistics from all ages being included.

The numbers in each square shew the numbers of cases with vision corresponding to the degree marked on the vertical line (left eye) and top line (right eye), *e.g.*, there were 450 children with equal vision of 6/9 in each eye, and 30 children with vision of 6/12 in the right eye, and 6/9 in the left eye, and so on. In cases in which a child wearing spectacles was tested, the record of visual power with spectacles has been recorded.

		R. Eye.								
		— <sup>6</sup> / <sub>6</sub>	6	9	12	18	24	36	60	<sup>0</sup> / <sub>60</sub>
L. Eye.	— <sup>6</sup> / <sub>6</sub>	140	—	—	—	—	—	—	—	—
	6	4	1979	69	8	10	3	10	5	5
	9	1	72	450	30	16	7	9	1	2
	12	—	16	22	64	16	2	6	1	3
	18	1	16	15	15	108	16	11	1	1
	24	—	1	8	6	14	29	12	1	2
	36	—	10	7	4	14	7	23	6	1
	60	—	8	3	3	4	1	5	7	—
	<sup>0</sup> / <sub>60</sub>	—	8	7	2	4	2	1	1	6



From this table the following facts may be obtained :—

1. The number of children with equal vision in each eye is 2,806, *i.e.*, 84 per cent. of the total examined.
2. The number with better vision in the right eye than the left is 282 ; with better vision in the left eye is 254, *i.e.*, respectively 8·4 per cent. and 7·6 per cent. ; or 16 per cent. of the children have unequal vision in the two eyes.
3. The number of children with vision better than the normal is 144, or 4·3 per cent.

The next table shews the degree of visual power among the children.

EQUAL IN EACH EYE.			UNEQUAL.		
Degree.	No. of Children.	Per-centage.	Degree.	No. of Children.	Per-centage.
$\frac{6}{6}$ ... ..	2,119	63·4	* $\frac{6}{6}$ one eye and less in other ...	247	7·4
$\frac{6}{9}$ ... ..	450	13·5	$\frac{6}{9}$ ,, ,, ,, ...	127	3·8
$\frac{6}{12}$ ... ..	64	1·9	$\frac{6}{12}$ ,, ,, ,, ...	58	1·7
$\frac{6}{18}$ ... ..	108	3·2	$\frac{6}{18}$ ,, ,, ,, ...	65	1·9
$\frac{6}{24}$ ... ..	29	·9	$\frac{6}{24}$ ,, ,, ,, ...	25	·7
$\frac{6}{36}$ ... ..	23	·7	$\frac{6}{36}$ ,, ,, ,, ...	13	·4
$\frac{6}{60}$ ... ..	7	·2	$\frac{6}{60}$ ,, ,, ,, ..	1	·03
$\frac{0}{60}$ ... ..	6	·2	$\frac{0}{60}$ ,, ,, ,, ...	—	—
	2,806	84·0		536	16·0

\*  $\frac{6}{6}$  or more.

*Errors of Refraction, &c.*—A rough classification, based on tests with + and — lenses and astigmatic cards was made.

The next table shews the result of this testing—

	MALE.		FEMALE.		TOTAL.	
	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.
Hypermetropia ...	463	26	567	34·8	1030	30·8
Myopia ... ..	86	5	110	6·7	196	5·8
Astigmatism ...	96	5·6	111	6·8	207	6·1
Squint ... ..	54	3·1	35	2·1	89	2·6
Eyestrain ... ..	4	·2	18	1·1	22	·6
Opacities ... ..	13	·7	8	·4	21	·6
Other Defects ...	1	...	2	...	...	...
Total ... ..	717	40·6	851	51·9	1568	46·5

We thus have the following data :—

*Total Children* examined ... .. 3342

*Total Defects*—

Male ... .. 717 = 41 per cent.

Female .. .. 851 = 52 „

Male and Female... 1568 = 46·5 „

*i.e.*, 53·5 per cent. of the children examined have normal vision. In most of the remaining 46·5 per cent. the defect is remediable. 21 children

were found to have defective vision owing to opacities, generally of the cornea, but in two cases of the lens.

On referring to the previous table, it will be seen that 63·5 per cent. of the children were able to read  $\frac{6}{8}$ , *i.e.*, that there is a difference of 10 per cent. apparently in the estimated number of children with normal eyesight. This 10 per cent. is made up of children with a slight grade of hypermetropia, who are able to accommodate sufficiently to read  $\frac{6}{8}$ , and who still read  $\frac{6}{8}$  on placing a + 1 convex lens in front of their eyes.

*Errors of Refraction at various Ages.*—The following table has been constructed to shew the percentage incidence of hypermetropia and myopia (including cases of astigmatism associated with these defects) at different ages:—

<i>Age.</i>	<i>Per cent.</i>		<i>Per cent.</i>	
	<i>Hypermetropia.</i>		<i>Myopia.</i>	
6	...	44	...	·4
7	...	41	...	2·0
8	...	34	...	4·0
9	...	35	...	6·0
10	...	35	...	5·0
11	...	35	...	8·5
12	...	32	...	8·3
13	...	26	...	9·1
14	...	23	...	11·2

This shews the increase of myopia from 6 onwards very clearly. Myopia is a disease essentially brought on by school work.

The percentage incidence of cases of astigmatism and of strabismus at different ages shows no special characters, the incidence being much the same at each age.

*Strabismus.*—Only two cases of divergent strabismus were found; 87 cases of convergent strabismus, frequently bilateral, were met with. In almost every case there was a great loss of visual power in one eye. The child frequently has almost normal vision in the one eye. Hence it is generally only by actual demonstration of the loss of vision in the other eye that we can persuade the parents to take steps to remedy this.

*Eye Strain.*—This condition is usually met with in children with hypermetropia (long sight) or astigmatism. The condition is shewn by repeated attacks of headache, generally referred to the forehead or temples; these headaches are associated with the performance of “near” work, *e.g.*, sewing, reading, &c.; the eyeballs ache and there is some dimness of vision, and inability to keep the eye fixed on the work. Objectively eye strain is shown by the presence of ciliary blepharitis (inflamed eye lids), styes, conjunctivitis and twitching of the lids. 22 cases were found in which this was very noticeable. Special instructions were given in regard to the school work of these children.

During the vision testing it was found that the spectacles worn by many of the children were in such a dirty condition as to seriously impair vision. It was invariably found that cleaning these glasses led to distinct improvement; generally to the extent of at least one line of the test type card.



In view of this a circular was sent to head teachers, asking them to pay special attention at the beginning of each school session to the condition of spectacles.

In a few cases, after the provision of spectacles, some difficulty is met with in the refusal of children to wear them; this is generally dealt with by interviewing the parents and explaining the necessity for the constant wearing of glasses.

#### RECOMMENDATION FOR TREATMENT.

Only those children with vision of  $\frac{6}{18}$  or less, with strabismus or with eye strain, were recommended for treatment. This limitation of cases was considered necessary because of the exceptional increase of work in the hospitals, to which they almost all go.

The number of cases thus recommended was 392.

Errors of Refraction, $\frac{6}{18}$ or greater error...	...	277
Strabismus	... ..	89
Eye Strain	... ..	22
Other cases	... ..	4
Total		392

#### DISEASES OF THE HEART.

In 126 cases, *i.e.*, 2·5 per cent., a haemic murmur was present over the heart area. In most cases this has very little significance, especially in young children with thin chest walls.

In 9 cases (·2 per cent.) functional disease of the heart was diagnosed, while in 44 (·9 per cent.) organic heart disease was present. The following were the lesions:—

Mitral regurgitation	... ..	35
Mitral stenosis and regurgitation	...	5
Mitral stenosis	... ..	1
Congenital morbus cordis	... ..	3

In the majority of the cases of mitral disease a rheumatic history was obtained. In one case only was there failure of compensation.

Exclusion from drill or a modified drill was suggested where organic disease was present; most of these children were allowed to continue at games with certain restrictions. The parents were seen in every case and were instructed as to general management of the child's health, especial stress being laid on the early and thorough treatment of rheumatic manifestations in certain cases.

#### DISEASES OF THE LUNGS.

The commonest condition met with was a sub-acute bronchial catarrh. This was found in 35 cases, *i.e.*, ·7 per cent., and was generally associated with mouth-breathing and adenoids. Advice was given in such cases as



to the removal of the cause. Bronchitis was present in 9 children; asthma in 1 child; bronchiectasis in 1, and fibrosis of the lung in 2 children.

*Phthisis*.—Active phthisis was met with in 1 case only. In 13 other children this disease was quiescent or possibly present, with very slight physical signs. Most of these cases are periodically re-examined at the Town Hall, and, if necessary, are sent up to the Sanatorium for treatment.

Tubercular enlargement of the bronchial glands was found in 1 case.

In all the above cases advice was given as to the general principles of hygiene; most of the cases were excluded for definite periods from school, and over 75 per cent. received Sanatorium investigation and treatment.

A considerable number of children were examined during the year who were said to have "consumption." In very few were any signs of the disease detected; in quite a number of the cases "adenoids" was the cause of the symptoms, the association with recurrent bronchial catarrh doubtless leading to this assumption.

#### DISEASES OF THE NERVOUS SYSTEM.

*Chorea* (St. Vitus' Dance).—8 children were found suffering from this disease. All were excluded from school, and examined for other rheumatic manifestations.

A circular has been sent to all head teachers, drawing their attention to this disease and its associations; it is hoped that cases will be notified early to the Public Health Department, and will thus receive prompt treatment.

*Neuroses*.—12 cases were met with, including 3 associated with moral defects; somnambulism and night terrors were the usual complaints; 6 cases of various forms of "habit spasm" were discovered; one case of "pica" was found.

*Epilepsy*.—18 cases (4 per cent.) of this disease were found; 6 were associated with mental deficiency—these were attending at the Special School (in one only of these was the disease acute). At present there are 2 children in epileptic institutions, while 3 have been recommended as suitable cases for such, but up till now have been unable to obtain admission, as no vacancies exist.

*Mental Deficiency*.—There are at present 48 children attending the Special School; while 15 have been recommended during the year for admission to this school. All children attending the Special School were inspected during the year. The proportion with physical defects was very large; the striking lack of initiative on the part of the parents to obtain treatment would seem to be excellent confirmatory evidence of the hereditary nature of many of these cases.

The following were the types of mental deficiency:—

Hydrocephalic, 1; Microcephalic, 1; Spastic idiocy, 2; Mongol, 3;  
Epileptic idiocy, 6; Unclassified, &c., 33.

*Traumatic Neurasthenia.*—Two cases of this condition, following concussion of the brain, were found. Modification of the routine lessons and games were suggested.

*Paralyses.*—Infantile paralysis of the more usually affected muscle groups of the lower limbs was found in 10 cases, associated with the common deformities. In one instance only was the arm affected. Ophthalmoplegia externa was found in two cases; paralysis of the seventh nerve in four; two cases of spastic paraplegia and one of diplegia were found; two children suffered from hemiplegia with athetosis; paralysis of the trapezius was found in one case.

#### DISEASES OF THE SKIN.

A condition of the skin, frequently met with in school children, is a patchy desquamation over the face and neck, probably of a seborrhoic nature, and associated with a soap of poor quality and inefficient washing and drying of the face. This was found in 320 cases, *i.e.*, over 6 per cent.

Impetigo of the face was found in 47 cases; of the scalp, 11 times. Eczema existed in 27 children; seborrhoic eczema in 5.

Marked seborrhea was found to be present in 77 cases; 40 cases of tinea capitis, and 4 of tinea circinata were discovered.

The following were the other conditions found:—multiple warts, 20; xeroderma, 26; acne, 14; herpes labialis, 9; herpes zoster, 6; psoriasis, 7; lichen urticatus, 6; pityriasis rosea, 5; scabies, 4; sebaceous cyst, furunculosis, urticaria, onychia, cheloid scars, 2 each; alopecia areata, alopecia, erythema pernio, leucoderma, 1 each.

#### DEFORMITIES.

*Spine.*—*Lateral curvature* was found in 62 cases (1 per cent.); in two only was the affection severe. In the remaining 60 the condition was one of lateral deviation of the spine. Instructions were given in such cases as to the maintenance of correct posture, and to the advantage of systematic drill.

*Kyphosis*: 20 children shewed this condition in a considerable degree. Exercises were recommended.

*Lordosis*: 3 cases.

In certain of the above cases the spinal deformity was secondary to some defect of the lower limbs.

*Chest.*—Apart from deformity of the chest, due purely to rickets, the following conditions were found:

Flat chest...	...	74	...	1.4 per cent.
Pigeon chest	...	68	...	1.2 „
Funnel chest	...	17	...	.3 „
Barrel chest	...	2	...	—

These deformities are usually associated with the presence of adenoids or mouth breathing, or are the result of previous lung diseases. A great improvement might be effected by suitable exercise.



### RICKETY DEFORMITIES.

Deformities of the chest and skull were found in 121 cases, *e.g.*, 2·2 per cent. 20 children shewed noticeable curvature of the tibiae; in 14 cases associated with genu valgum (knock knee), and in one case with genu varum (bow legs).

*Lower limb.* Various forms of "club foot" were found: these were generally associated with infantile paralysis. Talipes equino-varus, 5; talipes varus, 1; talipes valgus, 2; hallux valgus, 1.

*Upper limb.* Only three cases of acquired deformities were found: cubitus varus, 2; cubitus valgus, 1.

*Congenital malformations, &c.*—(a) *Head and neck.* Torticollis, 3; facial asymmetry, 5; deformity of ear, 2; bifid uvula, 12; cleft palate, 5; hare lip, 1; accessory auricle, 2; mongolian eye folds, 44.

(b) *Upper limb.* Syndactyly, 2; macrodactyly, 1; microdactyly, 1; bifid thumb, 1.

(c) *Other.* Supernumerary nipple, 5; hypospadias, 1.

### TUBERCULOSIS.

In most of the cases in which evidence of tuberculosis was found the disease was quiescent. The following were the lesions found: Phthisis, 13 (quiescent), 1 (active); enlarged bronchial glands, 1; abdominal tuberculosis, 1; tubercular glands of neck, 3 (active); scars of tubercular abscesses of neck, 21; spine, 2; hip, 5 (quiescent), knee, 1 (active).

Definite evidence of tuberculosis was present in 48 cases attending school, *i.e.*, about 1 per cent. Exclusion was advised in 10 of these cases, the disease being arrested and quiescent in the others.

### OTHER DISEASES.

The following were also met with:—

*Alimentary System.*—Incontinence of faeces, 2; intestinal parasites, 8.

*Osseous System.*—Partial fracture of clavicle, ununited fracture of clavicle, malunited fracture of humerus, 1 each; subluxation of joints, 2; periostitis of lower jaw, 3; sinus of leg, 2.

*Other Systems, &c.*—Achondroplasia, 1; congenital syphilis, 2; diabetes insipidus, 1; nocturnal incontinence, 6; cystitis, 1; lobular mastitis, 1; anæmia, 33; inguinal hernia, 2, femoral, 1, ventral, 1, of linea alba, 2.

### VACCINATION.

The number and approximate size of vaccination scars was noted in each child examined. Out of 5,104 children, 24·5 per cent. shewed no vaccination marks.

The following table shews the results of this examination. It will be noticed that the percentage of children with vaccination scars of one inch and over progressively increases with the age.

Year.	Total Examined.	Percentage with no visible Marks.	Number of Marks.					Size of Marks.					Total Vaccinated.	
													Per cent. under 1 in.	Per cent. of 1 in. and over.
			0	1	2	3	4	0	$\frac{1}{8}$ in.	$\frac{1}{4}$ in.	$\frac{1}{2}$ in.	1 in.		
3	229	25·3	58	55	30	23	63	58	120	45	6	—	95	5
4	571	22·7	130	128	112	43	158	130	253	151	36	1	94	6
5	651	21·6	141	109	152	77	172	141	234	202	72	2	90	10
6	409	25·8	106	69	100	43	91	106	145	127	30	1	93	7
7	325	24·3	79	59	66	42	79	79	113	106	25	2	89	11
8	337	25·8	87	53	79	42	66	87	95	114	38	3	91	9
9	266	27·8	74	52	61	28	51	74	76	76	37	3	88	12
10	234	29·4	69	27	57	33	48	69	60	71	32	2	84	16
11	223	27·8	62	35	51	27	48	62	37	68	47	9	75	25
12	243	21·4	52	46	58	30	57	52	34	87	61	9	73	27
13	1470	25·2	371	260	325	179	335	371	145	462	426	66	70	30
14	146	15·0	22	20	36	31	37	22	15	60	41	8	62	38
Totals	5104	24·5	1251	923	1127	598	1205	1251	1327	1569	851	106	82·2	17·8

The percentage proportion of the child population at all ages between 3 and 14 with a vaccination mark of 1 inch or over is only about 18 per cent.

(f) REVIEW OF THE METHODS AVAILABLE FOR THE TREATMENT OF DEFECTS.

The parents of any child with a serious defect are at once notified after inspection, and are requested to seek advice from their usual medical attendant. Inasmuch as it is not to the advantage of the private practitioner to treat cases of *defective vision and adenoids* among the poorer classes, the majority of children so affected are taken to hospital for treatment. The hospitals, &c., available for such cases are :—

1. Sussex County Hospital for treatment of all cases.
2. Eye Hospital.
3. Throat and Ear Hospital.
4. Children's Hospital, for the treatment of all cases except those with errors of refraction.
5. Dental Hospital.
6. Dispensaries.

The Borough is thus well supplied with institutions for the treatment of general and special cases.

Admission to most is by letter; this system ensures some enquiry into the necessity for hospital—as opposed to private—treatment. At times, however, difficulty is experienced by parents in procuring these, and this has led to delay in treatment. The Association of Head Teachers is a subscriber to several hospitals and distributes a certain number of letters; the Medical Officer of Health also receives letters direct from the Secretaries of certain institutions and also from private subscribers; the parents, however, have been mainly dependent on the clergy or the direct charity of private individuals.



The Board of Education indicate that before treatment of ailments is undertaken by the Local Education Authority, full advantage should be taken of the benefits of Hospitals, Infirmarys and Dispensaries. It was because of this instruction that, on the 23rd November, 1908, a letter was addressed to the Boards of the four first-mentioned hospitals. In this letter the difficulty of procuring recommendation cards for children who could not afford private treatment was pointed out, and inquiry was made as to the terms on which these hospitals would be prepared to assist the Education Committee in meeting this difficulty.

The gist of the replies from the hospitals was as follows :—

Hospital A.— . . . “as a large number of the letters of recommendation issued to subscribers remain unused . . . there does not appear to be sufficient reason for the necessity of making any special arrangement . . . on the lines suggested.”

Hospital B.— . . . “the making of special terms is *ultra vires*.”

Hospitals C. and D.— . . . “do not see their way to enter into any special arrangement . . . but if the Education Committee subscribe to the funds of the hospital, they can obtain letters for such cases in accordance with the rules of the institution.”

The local authority have decided on no definite line of action, but it is probable that in the first place the Education Committee will become ordinary subscribers to the hospitals if a sufficient number of letters are not forthcoming on a public appeal being made to subscribers.

*The Provision of Spectacles.*—Not infrequently, after a child has been treated for an error of refraction and has received a prescription for spectacles, the parents express their inability to provide these, on the ground of poverty. Through the kindness of the officials of the Charity Organisation Society, an arrangement has been come to whereby the circumstances of such cases are investigated, and spectacles are supplied to deserving cases. In about 50 per cent. of these cases, however, the application for help is advisedly refused, and as a rule no further steps are taken by the parent to provide the spectacles. It would appear that under S. 12 Part II. of the Children's Act, 1909, the duty of providing spectacles may legally be required of the parent.

In regard to the treatment of general diseases and minor ailments, the parents are urged, as far as is possible, to secure treatment from the private practitioner.

*Otorrhœa.*—It is recognised that chronic otorrhœa is in a majority of cases incurable, except temporarily, at home. Much, however, can be done to ameliorate the condition, especially in the lessening of the amount and offensiveness of the discharge. In order that coexistent aggravating conditions might be removed, and that courses of treatment might be prescribed, all those cases were asked to seek advice.

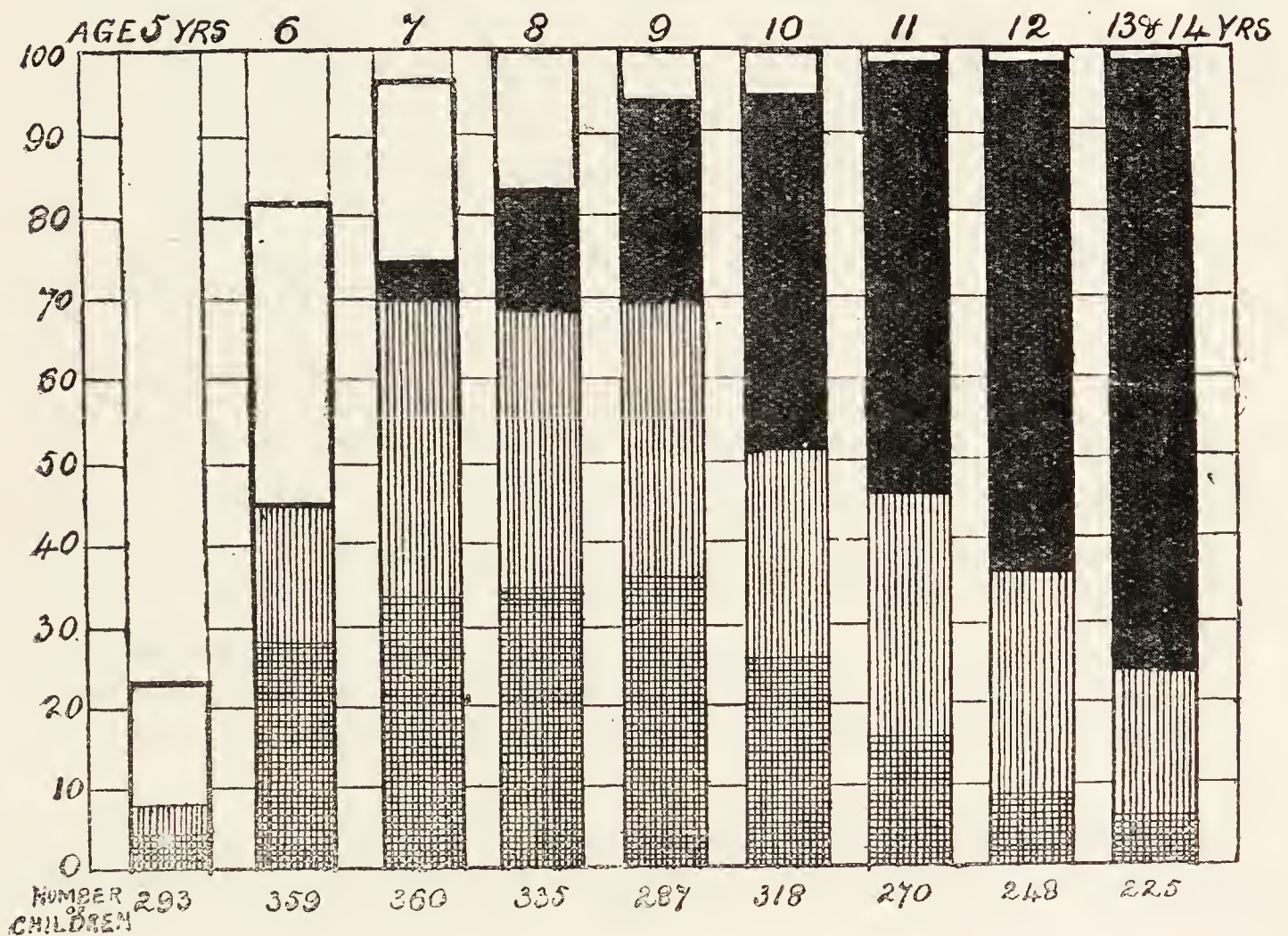
*The Teeth.*—The treatment of dental caries is a serious problem. No institution exists in Brighton large enough to cope with even a part of the



work to be done. The appointment of a whole-time school dentist would ensure the treatment of the worst cases, and the application of conservative measures to the teeth of many children, more especially those of six and seven years of age. At this period of life the preservation of the first molars of the permanent set of teeth is of vital importance, as on these teeth fall the burden of mastication, until the child reaches the age of 12 or 13. As has been sufficiently demonstrated at the Cambridge Dental Clinic, caries of the six-year molar is very common, and a very small percentage of children reach the age of 12 without destruction of this tooth. It would, of course, be impossible for one dentist to treat more than 2,000 children in the year, but the saving of caries affected in a few years would materially diminish the work in future.

We consider this matter of such great importance that we here insert two tables from the Report on Dental Inspection and Treatment in Cambridge.

DIAGRAM GRAPHICALLY REPRESENTING TABLE F, AND IN ADDITION SHOWING THE APPEARANCE OF THE FIRST PERMANENT MOLARS AND THEIR RELATIVE LIABILITY TO CARIES ACCORDING TO AGE.

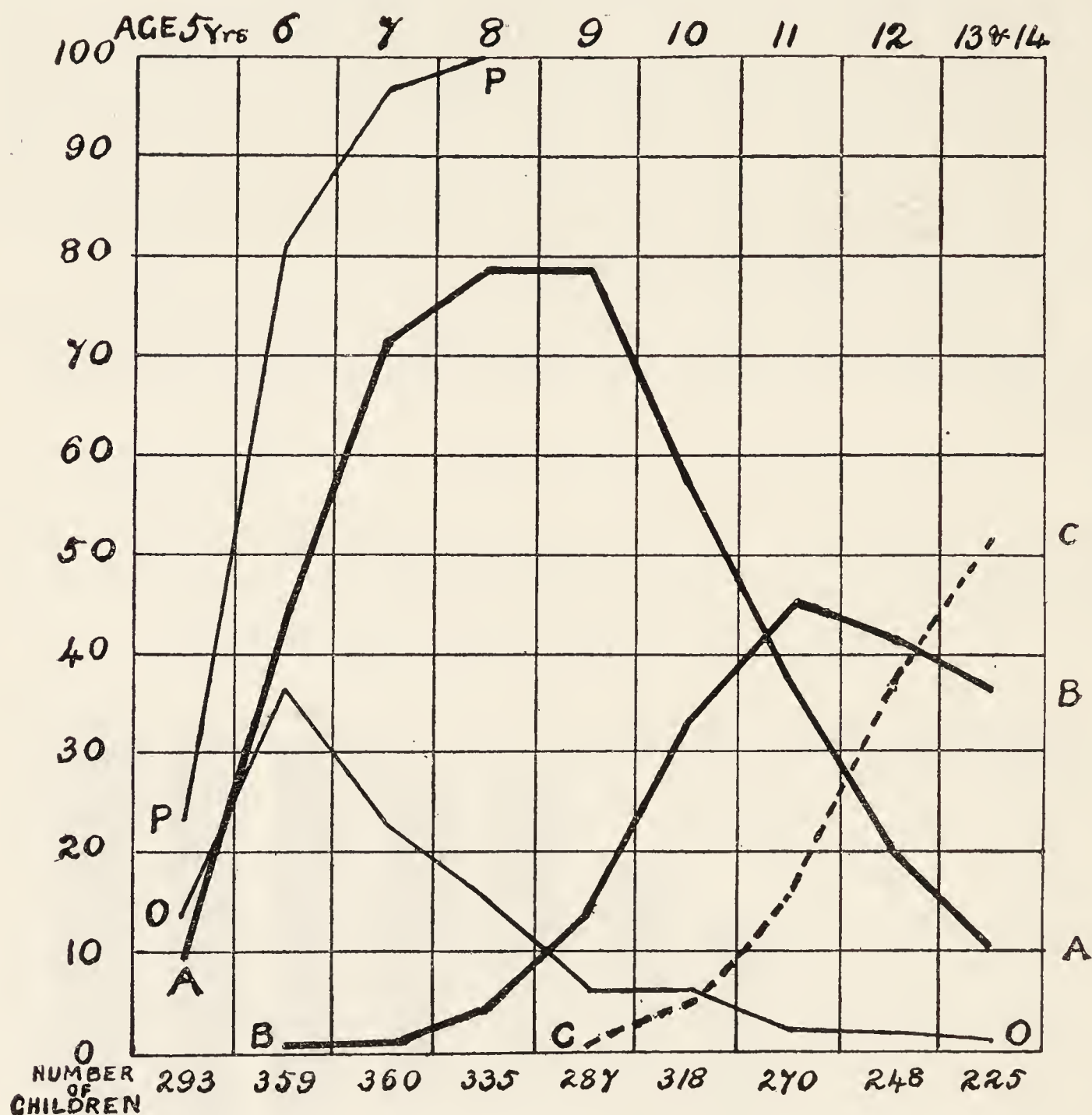


The height of the column indicates the Percentage of Children having Permanent Molars ; the shaded parts of these columns show those with sound and carious teeth.

SOUND  SAVABLE  SAVED  UNSAVABLE 



DIAGRAM ILLUSTRATING TABLES C AND F, AND SHOWING THE PERCENTAGE OF CHILDREN HAVING PERMANENT TEETH, AND 0, 1—4, 5—8, OR 9, OR MORE PERMANENT TEETH CARIOUS AT EACH AGE.



P represents the Percentage of Children with Permanent Teeth.

O represents the Percentage of Children with Sound Permanent Teeth (Good = no decay or loss).

A represents the Percentage of Children with 1—4 Permanent Teeth Carious (Fair).

B represents the Percentage of Children with 5—8 Permanent Teeth Carious (Bad).

C represents the Percentage of Children with 9—19 Permanent Teeth Carious (Very Bad).

A careful study of those tables shows the urgent necessity for the appointment of whole time school dentists, Table G also shows the amount of treatment which can be accomplished by a dentist in one year.

#### ACTION TAKEN BY NURSE HENSON.

Her duties, apart from assisting in the inspection, consist in the periodical visitation of the cases which require special treatment, and the giving of advice as to the necessity and means for procuring treatment. Such advice is in accordance with instructions previously received from the Medical Officer of Health or the School Doctor. We are of the

opinion that the work of this part of the system is of the utmost importance, and that, to the manner in which it has been performed, is due largely the success which has followed medical inspection in its initial year. Many cases in which no action had been taken after the first visit, were promptly seen to after a second or third visit. Personal visitation, moreover, has the advantage of disclosing the cause of neglect or refusal to take action. Again, a tactful nurse is able to secure information regarding the condition of the home, and the social circumstances of a family, which is of value in dealing with these cases.

Since commencing her duties in September, 953 homes have been visited; 1,459 visits were made, 472 homes being visited once, 356 twice, and 125 three times.

No treatment has been carried out.

#### TREATMENT OF DEFECTS AT THE SCHOOL CLINIC.

In October, 1907, following a recommendation by the previous Medical Officer of Health, Dr. Newsholme, to the Education Committee, a weekly consultation for the treatment of contagious skin diseases was started.

Up to January, 1908, 123 cases had been treated at the Clinic.

The cases usually attend weekly, unless under proper home supervision, when some are allowed to attend once a fortnight. As far as is possible, children whose parents can afford medical advice are not treated at the Clinic, but are sent back to their medical attendant. Those parents who can afford to pay for the ointment provided are invited to do so.

The majority of cases at the Clinic are sent by the School Nurse (Nurse Payne), but since the routine inspection of the schools started, an increasing number are sent by the School Doctor. It is an encouraging sign of the interest taken in the scheme by the head teachers, that the number of children sent by them is also increasing.

There is evidence that the Clinic improves school attendance; several cases have come under observation of impetigo arising from pediculosis, in which the child has been absent for three or four months; while, with proper treatment, the affection has been cured in ten days, and the child has returned to school in a fortnight.

#### TREATMENT BY NURSE PAYNE.

Visits are made to the homes of certain of the worst cases, and assistance is given to the mother in the treatment; this personal demonstration is of material advantage. In this connection the number of home visits made by Nurse Payne was 419.

*Cases of Scabies* are treated in the Borough Sanatorium, when a spare ward can be obtained. Their stay in the Sanatorium is limited to some ten days, during which time their clothes are disinfected and the skin condition cured. Advice is given to the parents as to the cleansing of the sheets, &c.; the duration of the disease is much lessened.

The following record shews the number and nature of the cases treated during 1908:—



<i>Disease.</i>	<i>No. of cases.</i>	<i>Attend-ances.</i>	<i>Results.</i>
Verminous condition of head ...	53 ...	162 ...	Improved.
Ringworm of head ...	111 ...	759 ...	{133 cured, 6 sent to private doctors.
„ „ body ...	28 ...		
Eczema ...	44 ...	127 ...	Cured.
Impetigo ...	62 ...	90 ...	Cured.
Scabies ...	20 ...	76 ...	Cured.
Ciliary blepharitis ...	12 ...	25 ...	Cured.
Phlyctenular ulcers ...	4 ...	6 ...	3 sent to hospital.
Conjunctivitis ...	3 ...	16 ...	Cured.
Alopecia (other than ringworm) ...	7 ...	28 ...	Improved.
Other conditions ...	12 ...	13 ...	{10 sent to hospital. 2 cured.
Total ...	356	1302	

Number and nature of cases at present under treatment:—

Verminous heads ...	...	...	3
Ringworm ...	...	...	53
Scabies ...	...	...	6
Impetigo ...	...	...	4
Eczema ...	...	...	10
Blepharitis ...	...	...	6
Alopecia ...	...	...	3
Total ...	...	...	85

The clinic was held 41 times during 1908, the average number attending being 32.

*Expenditure on the Clinic, &c.—*

Ointment, &c....	...	...	£2 13 5
Paid by patients	...	...	2 7 5
Deficit	...	...	£0 6 0

149 boxes of ointment were given away.

The rooms in which the clinic is held are in the school for mentally defective children. The hours for attendance are from 3.30 to 5 p.m. on Tuesday afternoons.

#### TREATMENT APART FROM THE SCHOOL CLINIC.

It has been previously mentioned that 1,843 children were found to be in need of advice or treatment for defects. Of this number 904, *i.e.*, 48 per cent., simply required advice as to home life and general hygienic conduct. In this group are included such cases as compensated heart disease, mouth breathers, cases of adenoids not requiring surgical treatment, quiescent tuberculosis, minor skin diseases, and mentally defective children. The remaining 52 per cent., 939 in number (a percentage of 18.4 on the 5,091 children examined), were advised to seek treatment from a private practitioner, or in default, from hospital. The majority of these children suffered from defective vision or enlarged tonsils and adenoids.

The following table shews the number suffering from these defects and the number recommended for treatment :—

	<i>Number of children.</i>	<i>Number treated.</i>	<i>Percentage treated.</i>
Enlarged tonsils and adenoids ...	330	150	45·4
Defective vision ...	392	215	55·0

In the above, operations were performed in all cases of enlarged tonsils and adenoids, and spectacles *procured* in the eye cases. The number treated for defective vision is probably 10 per cent. higher than that stated above, since in a certain number of cases (especially of irregular astigmatism of one eye) it was not found advisable for the child to get spectacles; moreover, quite a number of children had prescriptions for spectacles given by the hospital authorities, and it was found that the parents were unable and unwilling to pay for these. A further group of children whose vision requires attention are at present in attendance at the hospitals, but have not yet obtained spectacles. It should be mentioned that some 20-30 children have been recommended to obtain spectacles after special examination, apart from medical inspection; these are not included in the returns for routine inspection.

The following table shews the number of children obtaining treatment for various conditions at the different hospitals so far as we have been able to ascertain :—

Hospital.	Errors of Refraction. Spectacles obtained.	Operations for Tonsils and Adenoids.	Other Conditions.	Total.
Sussex County ...	69	54	71	194
Eye Hospital ...	79	—	35	114
Throat Hospital ...	—	56	18	74
Children's Hospital...	—	16	24	40
Clinic ...	—	—	—	25
Dental Hospital ...	—	—	—	8
District Nurses ...	—	—	—	3
Dispensaries...	—	—	—	15
Dentist ...	—	—	—	9
Private Practitioners	6	4	67	77
Unascertained (chiefly Hospitals)	61	20	—	81
	<hr/> 215 <hr/>	<hr/> 150 <hr/>	<hr/> 215 <hr/>	<hr/> 640 <hr/>

Thus, 640 out of 939 children obtained treatment, *i.e.*, 68·2 per cent. Of the remainder 194 (20·6 per cent.) took no action at all, 38 (4·0 per cent.) refused treatment altogether, and 67 (7·1 per cent.) had left school without obtaining treatment. The number obtaining treatment from charitable institutions was 448, *i.e.*, 84 per cent.; from a private practitioner or dentist 84, *i.e.*, 16 per cent. The above statistics do not aim at giving the precise number of school children applying for treatment at the several hospitals, &c.; undoubtedly that number is much larger than stated; these figures represent approximately the numbers attending because of advice given at the routine school medical inspection.



(g) REVIEW OF ACTION TAKEN TO DETECT AND PREVENT THE SPREAD OF  
INFECTIOUS DISEASES.

Particulars are given on pages 9 and 10 regarding school closure following outbreaks of diphtheria, measles, and whooping cough.

The following statement comprises the chief rules on which official action is taken in Brighton in regulating the cessation of isolation and return to school of patients and periods of quarantine of relatives.

I.—SCARLET FEVER.

(i.)—*As regards the Patient himself—(a) When treated in the Sanatorium*, he is detained for about five weeks, and longer if any mucous discharges are present. After return home, in view of the occasional sub-chronic infectiveness of such discharges, a notice is sent to the teacher, and a notice is also given to the mother to the effect that the late patient must not attend school for four weeks.

(b) *When treated at home*, the same rules apply exactly, assuming that the patient and his rooms have been efficiently disinfected. The same remark as above applies to the possible prolonged infectivity of the mucous discharges.

(ii.)—*As regards the Occupants in the same house—(a) When the patient has been removed to the Sanatorium*, the teacher and the parent are instructed to keep all children belonging to the same house away from school, and the latter is instructed to keep them out of contact with other children during the next one complete week.

(b) *When the patient is treated at home*, no other children from the same house should attend school while the patient is infectious, nor for one week afterwards.

II.—DIPHTHERIA.

(i.)—*As regards the Patient himself—(a) When treated in the Sanatorium*, the patient is detained until three successive swabs on successive days give consistent negative results. These swabs are not taken until at least 24 hours have elapsed since the last use of any disinfectant solution to the throat.

After return home, in view of the debility left by diphtheria and of the possible return of infectivity in the secretions of the nose or throat, a notice is sent to the teacher stating that the late patient must not return to school for four complete weeks.

(b) *When treated at home*, three successive negative swabs should be obtained as above; and after disinfection of the patients and his rooms, the same period of subsequent abstention from school attendance should be enjoined.

(ii.)—*As regards the Occupants of the same house—(a) When the patient has been removed to the Sanatorium*, the teacher and the parent are instructed to keep all children belonging to the same house away from school during the four next complete weeks, and the latter is instructed to keep them out of contact with other persons during the same period.

This interval has been found necessary, owing to the frequent occurrence of slight cases of diphtheria or "carrier" cases.

(b) *When the patient is treated at home*, no other child from the same house should attend school while the patient is infectious, nor for four weeks afterwards.

### III.—MEASLES.

Most children over seven years of age who are attending elementary day schools have had measles, and, in view of this consideration, the practice now adopted when measles breaks out in a household is as follows:—

Only the children of the same household who attend the infant school and those older children who have not had measles are excluded from school.

Children having measles should be isolated for three weeks, and the above-indicated children in the same household should be excluded from school for three weeks from the date of onset of the illness of the last patient with measles in the house.

### IV.—WHOOPIING COUGH.

Patients suffering from whooping cough are excluded for at least six weeks. Contacts attending the Infants' Departments alone are excluded.

The co-operation of the family doctor is earnestly requested in securing that children with whooping cough shall be kept separate from other children and indoors during the infectious period.

### V.—MUMPS AND CHICKEN POX.

In cases of mumps and chicken pox the patient only is excluded.

### VI.—RINGWORM OF THE SCALP.

Cases are allowed to attend school if the disease is of small extent and if it can be covered by a cap.

### (h) THE EDUCATION OF DEFECTIVE CHILDREN.

*Mentally Defective.*—The Special School for the education of mentally deficient children was first opened in 1898. It has accommodation for 40 children. It has been already pointed out that in the near future it will become necessary to increase this accommodation, or in other ways provide for the education of a larger number of such children. This question is at present under consideration, and it is proposed to carry out a special investigation during 1909, with a view of estimating the number of children in the Elementary Schools requiring special education.



*Physically Defective.*—No special arrangements at present exist for the provision of education of children who are suffering from physical defects, which prevent attendance at an ordinary school.

*Epileptics.*—Arrangements are made by the Education Authority to have children suffering from severe epilepsy educated in residential institutions. At present 2 children are in such homes, while 3 are waiting for vacancies to occur.

*Deaf and Dumb.*—4 children are at present receiving education in the local Institution for the Deaf and Dumb.

*Blind.*—9 children have been sent to the Barclay Home or the Institute for the Blind.

---

## WORK IN CONNECTION WITH THE EDUCATION (PROVISION OF MEALS) ACT, 1906.

A short history.—In 1898 a beginning was made in a Mission Hall, in which children had free breakfasts during the winter months. The cost was defrayed by private subscription, and the work was voluntary. The Education Committee recognised the movement in 1904, and sanctioned the sending of the meals to certain of the Elementary Schools. Many of the teachers acted as voluntary helpers. During the winter holidays, meals were given at the Corn Exchange. In May, 1907, the Education Committee associated itself with the Voluntary School Canteen Committee, under the Provision of Meals Act. Buildings, furniture, apparatus and officers (caretakers and a special staff) were thus provided for the preparation and serving of the meals. The voluntarily contributed funds now being insufficient, the Education Committee provided, and have continued to provide, on school days, dinners for those children who, except they were fed, would be unable, by reason of lack of food, to take full advantage of the education provided for them. Up to January, 1909, dinners were given on Saturdays at the expense of the Local Authority, but this having been held to be *ultra vires*, this expense and the expense of the provision of meals during the winter and spring holidays are entirely borne by voluntary subscription.

The Investigation Branch Sub-Committee consider the claims of applicants for meals. They base their decisions principally on the reports of the Medical Officer of Health, the School Doctor, and the School Attendance Officers.

### INVESTIGATIONS BY THE MEDICAL OFFICER OF HEALTH AND SCHOOL DOCTOR.

In former times only selected cases were sent to be medically examined, but now each child is medically examined before admission to the canteen. During 1908, 2,006 examinations were made. In this way a class of children, in which a greater proportion than normal suffer from defects, were medically inspected, also the most suitable children for feeding were recommended to the Committee's notice; these included children of deficient physique, children of deficient weight in relation to height, tuberculous children, &c. 50 per cent. of those examined were recommended for free meals.

[The proportion of non-recommended cases to those recommended is shewn in the next tables.

<i>Summer Session.</i>		<i>Non-Recommended.</i>		<i>Recommended.</i>
Boys	...	1	...	3
Girls	...	1	...	1·6
Infants	...	1	...	2·5
<i>Winter Session.</i>				
Boys	...	1	...	1
Girls	...	1	...	.7
Infants	...	1	...	1·4

From this it will be seen that, as a rule, the proportion of ill-nourished boys and infants is greater than that of girls.]



## INQUIRIES BY SCHOOL ATTENDANCE OFFICERS.

An enquiry is always made by the School Attendance Officers into the economic circumstances of each family. The weekly wage, the rent, and the number and age of those to be supported is taken into consideration. After deducting the amount due for rent, an allowance is made of 3/- weekly per adult, as a minimum amount necessary for food—2 children under 14 count as one adult. If on this calculation it is found that enough money is not being earned to support the family, the child is given free or partially free meals.

*The Menu.*—A menu was suggested and accepted by the Canteen Committee. It is calculated on a scientific basis, and supplies from 1-3rd to 2-3rds of the total food requirements of the day (calculated as Calories) for children of 14 years of age.

MONDAY	...	1 pint of pea soup ( $\frac{1}{4}$ -lb. peas), $\frac{1}{2}$ -lb. bread.
TUESDAY	...	Irish stew (large plateful), 4 oz. bread, 2 oz. cheese.
WEDNESDAY	...	1 pint of lentil soup ( $\frac{1}{4}$ -lb. lentils), $\frac{1}{2}$ -lb. bread.
THURSDAY	...	Suet pudding (with raisins or currants), 4 oz. bread, 1 oz. margarine.
FRIDAY ...	...	1 pint of haricot bean soup, 4 oz. bread.
SATURDAY	...	$\frac{1}{2}$ -lb. bread with 1 oz. margarine, 1 pint of sweetened cocoa.

The cost of the actual food material in the above meals averages  $\frac{3}{4}$ d.—1d. Alternative menus were suggested and are occasionally used. During the last session, children with quiescent tubercle have been given a glass of milk daily, about 11 a.m., while at school. If possible, the parent pays part or the whole of the cost: enquiry being made by the School Nurse.

*General arrangements.*—The cooking is carried out at one centre (Richmond Street). From here the food is distributed to other centres. These are now seven in number, viz., Circus Street, Hanover Terrace, Elm Grove, Queen's Park, Kensington Gardens, St. Margaret's, Special School. The superintendence of the meals is undertaken by voluntary lady helpers. The school teachers, who formerly helped in this work, are now not employed in any way, except in St. Margaret's and the Special School, where the head teachers voluntarily superintend the giving out of the meals.

The total number of free meals granted from October 5th to December 1st, 1908, was 23,921, an increase of 11,361 over the corresponding period of 1907.

The number of children in attendance was between 400 and 800; the total number of individual children who had received free meals up to December 1st being 890. 1,600 nominations for the meals were received. There has been an increase in these numbers since the re-opening of the canteen in January, 1909. The attendance on Saturdays is not included in the above numbers; the number fed is under the average on that day, the maximum being from 500 to 600.

During last session, 62 per cent. of the children receiving free meals came from 7 schools in poor localities; the remaining 38 per cent. came from 16 schools, while 9 schools sent no children at all.

Periodical visits were made to the chief centre; the materials used for meals were always found to be of good quality, and the cooking good.

(i) INSTRUCTION IN PERSONAL HYGIENE AND TEMPERANCE.

In many schools the elementary rules of hygiene are mentioned and discussed as occasion may require. No definite courses are at present included.

*Physical Exercises.*—These are carried out according to the course suggested in the code, *i.e.*, on a modified Swedish system. In summer two representatives attended a series of demonstrations of Swedish drill in London; their recommendations were sent by the Committee to other schools.

The drill in some of the schools was well done, and the children were well disciplined; in others, unfortunately, the number of children at drill was too great to enable adequate supervision to be exercised; the consequence being that many of the children benefited little by it.

*General Arrangements for Boys—*

Physical Drill for 2 days during week,  $\frac{1}{2}$  hour lesson, or 1 day, 1 hour lesson.

Swimming, 1 day in week, lesson of  $\frac{1}{4}$  hour to  $\frac{3}{4}$ .

Organised Games, 1 day in week for 1 to 2 hours.

*Girls*—Physical Drill in one or two schools for short periods only of 15 minutes, 4 times a week, instead of 1 drill of 1 hour.

*Infants*—Physical Drill and Organised Games daily in most schools. As a rule physical drill only with the older children and organised games chiefly for younger children. Times given vary greatly, 1 hour to 6 per week.

*Breathing Exercises* are in a few schools carried out systematically; it would be of great advantage if this was so in all schools, as by such means the teachers would immediately detect all cases of pronounced nasal obstruction, and would be able to bring these children out for the medical inspection.

*Organised Games.*—During summer, classes of children are taken out to various Parks and open spaces and there take part in organised games. This is admirably carried out in some schools, but naturally the success or otherwise of organised games depends upon the teachers; where sympathy is not felt with this movement it is generally a failure. In cases in which any considerable distance has to be traversed before arriving at the Park, it would be advisable to limit the amount of exercise for the more delicate children.

The School Sports held during the summer, and the Football League system, are organised and conducted by the head teachers themselves.

Swimming instruction is given to all children over 12 (boys or girls) who desire it. The Corporation Baths and the Swimming Bath at St. Luke's Terrace School form the centres for instruction.

*Open Air Schools, &c.*—No special arrangements were made for open air schools or holiday camps. In schools in which a suitable playground is available it is found possible to conduct some lessons in the playground, and where this is done no restrictions are made by the Authority.



To the Education Committee of Brighton :—

*Report from DR. EVES for the Year 1908.*

SPECIAL SCHOOL FOR MENTALLY DEFICIENT CHILDREN.

This school has regulation accommodation for 40 children. There are 48 names on the register. The average attendance has been 41·4.

During the year Dr. Lambert, the School Doctor, has discovered cases attending ordinary schools whom he has recommended for admission to this class, and these, with those already waiting, number 14.

I have visited the school 35 times during the year.

The health of the children has been good. Only two cases of infectious disease have occurred, one of scarlet fever and one of chicken pox. There have been no deaths. There is only one epileptic in the school (since left).

During the year seven new children have been admitted and seven have left—of these latter, two have been transferred to ordinary schools.

*Teachers, &c.*

6 teachers appointed for the first time under the Education Committee were examined by me and all were satisfactory.

41 bursary scholars were examined by me.

28 females—19 satisfactory, 9 referred.

5 deficient vision, 2 diseased teeth, 1 unvaccinated.

13 males—8 satisfactory, 5 referred.

1 deficient vision, 3 diseased teeth, 1 unvaccinated.

All those referred were ultimately passed as satisfactory.

During year 1908, the teachers, &c., absence from school owing to illness averages were :—

Provided Schools	...	4·1	days	per	teacher.
Non-Provided Schools	...	5·7	„	„	„
Pupil Teachers	...	3·2	„	„	„

P. STANHOPE EVES, M.D.

## **EMPLOYMENT OF CHILDREN ACT, 1903.**

### **CRUELTY TO CHILDREN ACT, 1904.**

A statement regarding the administration of the above Acts, prepared by Inspector Mills, is as follows:—

The work under the Employment of Children Act is materially assisted by the lists (supplied through the agency of the School Attendance Officers) of children attending the Elementary Schools in the Borough, who are employed out of school hours.

The lists from most of the schools are very complete and accurate, and of great assistance in subsequent inspections.

The *Spring* lists shewed—

695 children employed.

181 of these being employed contrary to the law.

The *Autumn* lists shewed—

760 children employed.

189 of these being employed contrary to the law.

The total number of irregularities in 1907 was 596, and the total number for this year was 370, showing a decrease of 226.

21 night inspections and 168 day inspections were made of premises where children were reported to be employed for excessive hours.

The written warnings and prosecutions in the past two years have had a good effect, and after the employers have been personally warned, they have employed the children in conformity with the bye-laws, and during the year it has not been found necessary to report any cases to the Chief Constable for prosecution.

## **PREVENTION OF CRUELTY TO CHILDREN ACT, 1904.**

The duties under this Act (formerly carried out by H.M. Inspector of Factories) are to see that all restrictions and conditions endorsed upon the licenses granted by the Magistrates to permit children to perform in places of public entertainment are properly complied with.

54 children were licensed during 1908, 48 girls and 6 boys.

31 employed as singers and dancers.

1        „        „ musician.

22       „       „ actors and actresses.

0        „        „ acrobats.

It is very satisfactory to note the absence of child acrobats; 18 were licensed in 1904, 7 in 1905, 1 in 1906, 2 in 1907, and none in 1908.

20 night inspections were made and 4 day visits, and the conditions of the license were in every case complied with.







County Borough of Brighton.

---

# HOW BRIGHTON IS KEPT HEALTHY.

---

## LECTURE

*Delivered at the Public Library, Brighton, on  
17th December, 1908,*

BY

COUNCILLOR JOHN LINTOTT

*(Chairman of the Sanitary Committee of the Brighton Town Council).*

---

HUGO TALBOT,

Town Clerk.

TOWN HALL, BRIGHTON,  
*March, 1909.*

---

KING, THORNE & STACE, PRINTERS, JUBILEE STREET, BRIGHTON.







On the Front.

## How Brighton is kept Healthy.

---

This Lecture was delivered by Councillor LINTOTT, the Chairman of the Sanitary Committee of the Brighton Town Council, at the Brighton Public Library, on Thursday, the 17th December, 1908.

---

THE town in which we reside was originally a small fishing village called Brighthelmstone. Most of the houses were then under the cliff, but these were gradually washed away by the encroachment of the sea, and new houses were built above the cliff to replace them.

In the 17th century, several shops and smaller tenements were swept away, leaving no trace of their remains.

In 1704, so violent a tempest raged here that many houses were unroofed, many entirely demolished, and the two windmills belonging to the town were overthrown.

In the following year, another dreadful storm destroyed every habitation under the cliff.

The havoc caused by the tempest was no doubt largely due to the flimsy construction of the houses at that date. The outer walls of many



of the old houses built in the 17th century, which have been demolished during recent years, were built of brickwork only  $4\frac{1}{2}$  inches thick, with no proper footings.

Soon after the storm of 1705, the first wooden groynes were erected to collect the beach in order to form a barrier against the encroachment of the sea.

In consequence of the constant action of the sea on the chalk cliff, the base became undermined, and in 1825 it was evident that some decisive measures were required to prevent the destruction of much valuable property. A sea wall was therefore built between the bottom of Ship Street and Mohamed's Baths, which then stood on or near the spot now occupied by Markwell's Hotel. The cost of this was raised by subscription. This wall may still be seen at the back of the present arches under the King's Road.

The sea wall was subsequently carried on by the Town Commissioners to Kemp Town, at a cost of upwards of £100,000. Its average height between the site of the old Chain Pier and Kemp Town is 60 feet; its thickness at the base is 23 feet, and at the top three feet. It batters four inches to the foot on the face. The foundations are sunk three feet in the chalk; it is built of concrete made from grey stone lime and shingle from the beach.

There is no doubt that one of the first things to establish the reputation of Brighton as a Health Resort was the building of the Royal Pavilion in 1784, as its use as a Royal residence was the means of bringing many wealthy people to reside in the town.



THE ROYAL PAVILION.

We have no reliable information of the sanitary conditions of the town at this date, but there is no doubt that the arrangements were very primitive. The effects of this, however, were not so serious as it would be if the same conditions existed now, owing to the small area built upon at that time. The buildings then extended only to West Street on the west, East Street on the east, and North Street on the north.



The first Public Health Act was passed in 1848, and a petition, signed by one-tenth of the ratepayers of the town, was sent to the Board of Health, requesting that the Act should be applied to Brighton, and after a public Inquiry the petition was granted.

The Inquiry was held at the Town Hall, on Monday, April 16th, 1849, and several following days, by Edward Cresy, Esq., Superintending Inspector of the Board of Health.

In his report, the Inspector stated that "No situation can be less exposed to humidity than Brighton. Open to the south and sheltered from the quarters from whence the colder winds proceed, the habitations are generally exposed to the southerly or south-west winds, and it has been observed that when there is a fresh breeze from the south or south-west, all that part of the town contiguous to the sea enjoys an almost Italian sky, and when in the winter winds blow from the north, there is a perfectly genial air on the Marine Parade and on the King's Road."

In the course of the Inquiry, the Inspector visited the various streets, alleys, courts, &c., and gave details of the deplorable condition of some of the houses in the back streets and courts at that time.

There was then no proper system of drainage. Sewers were laid to carry off the storm water from the roads, but the inhabitants were prohibited by law from discharging the soil from a privy or water closet into the sewers or to suffer it to run on the beach.

The whole of these storm-water sewers united to form a chief sewer, which discharged into the sea beyond low water mark, near the spot on which the Palace Pier now stands. The outfall consisted of a wooden trunk 30 inches wide and four feet high, and was constructed of 2½ inch beech plank. Numerous complaints were made of nuisances being caused by the impurities discharged from this sewer.

The total length of these storm-water sewers was 31,117 feet. Their dimensions varied from five feet six inches by three feet six inches, egg shaped, to 15 inches circular. The cost of laying them was £7,850, and the annual cost of repairs, cleansing, &c., was about £5,000. (The total length of main sewers in the Borough of Brighton at the present time, including that part of the intercepting sewer which is within the Borough, is 90 miles).

In consequence of the owners being forbidden to connect the drainage of their houses with the main sewer, other means of drainage had to be provided, and for this purpose cesspools were dug in the ground, in many instances under the floors of the houses. The liquid contents of these cesspools soaked away in the earth, and not only seriously contaminated the subsoil, but also polluted the water in the private wells from which the majority of the inhabitants obtained their drinking water, the wells in many instances being situated only a few feet away from the cesspool.

We sometimes think that under the present arrangements the draining of a house into the common sewer is an expensive process, but cesspool drainage is much more costly. In the year 1849, the population of Brighton was 58,950. At that time it was estimated by Mr. Cresy that the construction of the privies and cesspools then existing must have



cost not less than £50,000, and the annual cost of emptying them amounted to £5,000. This, added to the cost of repairs and cleansing of the storm-water sewers, brought the annual cost of the very imperfect drainage system to £10,000, or about £1 per annum for each house, which was a very serious matter, quite apart from the insanitary aspect of the question. The cesspools on the hill sides were especially objectionable owing to the soakage of their contents into the foundations of the houses below them.

In addition to the nuisances caused by the privies and cesspools, another serious one arose from pigstyes, which then existed in large numbers in the back streets and courts of the town. The slaughter-houses were also in a very bad state, being without proper drainage, and in a most insanitary condition.

It will be seen from this brief description that the sanitary condition of the town at that time was very bad; in fact, we who reside in Brighton to-day can scarcely realise its condition in 1849.

To bring the town to its present state of sanitary perfection has been a long and expensive process, involving a vast amount of labour on the part of the Local Authority, past and present, as well as on their officers.

The pigstyes have long since disappeared, as well as the greater part of the private slaughter-houses. The slaughter-houses which remain have all been put into substantial repair, and are in as good sanitary condition as circumstances will permit, but it would be a great benefit to the town if they could all be removed, though the cost of doing this would be very heavy.

All privies have been replaced by water closets, and all cesspools have been abolished.

The drainage of the Borough was commenced in 1865, and the sewers were gradually extended until a complete system of drainage was provided for the whole town.

Since that time, the Corporation have insisted on sewers being provided for all new building estates when the roads were laid out, and before any buildings were erected.

Previous to 1870, some of the sewers discharged into the sea in front of the town; as more houses were connected with these sewers, nuisances were caused, and the outfalls were extended farther into the sea.

In 1870, the Brighton and Hove Sewers Bill was passed. There were at this time eight outfalls discharging into the sea. A scheme for effectually dealing with the sewage of the town was thrown open for competition, and the following engineers competed:—

— Hawkesley, Esq., Sir R. Rawlingson, Sir J. Bazzalgette, Messrs. Maclean & Wright, and Sir John Hawkshaw.

The result of the competition was the present intercepting sewer to Portobello, which was recommended by Sir John Hawkshaw, C.E., who also designed the sewer and supervised the carrying out of the work.

This sewer commences at Hove Street, Hove, and passes along the sea front to Portobello. It is 5 feet in diameter from Hove Street to East

Street; 6 feet from East Street to the Old Steine; and 7 feet from Old Steine to the penstock chamber at Portobello. From this chamber the sewage is carried out into the Channel by three steel pipes, each 4 feet in diameter, laid side by side, and enclosed in concrete. The sewer is well ventilated, the principal ventilator being a large brick shaft at Roedean, 100 feet high, having a chamber at its base, in which a large coke fire is kept constantly burning. The depth of the sewer at this point is 100 feet, so that the top of the shaft is 200 feet above the sewer. The total length of the intercepting sewer is  $7\frac{1}{4}$  miles. The sewage is discharged into the sea by gravitation, no pumping being required. The discharge takes place at a point where it is met by a current and carried clear away into the channel.

Storm-water overflows are provided to relieve the sewer when there is a sudden heavy rainfall, in order to avert the danger of flooding the basements of houses. These outfalls seldom come into use, and when they do, only surface water from the roads is discharged from them.

The work of laying this sewer was commenced in January, 1871, and was finished in June, 1874, the cost amounting to £100,000.

Between January, 1889, and December, 1907, 516 houses which were found by the Sanitary Inspectors to be drained into cesspools, have been properly drained into the common sewer, and the cesspools emptied, cleansed, and filled up with earth; 189 houses which were drained partly into the sewer and partly into cesspools have been properly drained and the cesspools cleansed and filled up; and, in addition to this, 7,088 defective drains have been taken up and new drains substituted.

In the year 1884, the first Brighton Improvement Act was passed. At this time the greater part of the outdoor closets were not supplied with water, but had to be hand-flushed with pails, and consequently they were frequently choked, and nuisances were caused. This Act empowered the Sanitary Authority to order a proper supply of water to be laid on to every closet by means of an efficient flushing apparatus. It also made it imperative that all cisterns supplying water to a water closet should be so arranged that water for any other purpose than flushing the closet could not be drawn therefrom.

It also made it compulsory that all waste pipes from sinks, baths, &c., should, where practicable, be made to discharge in the open air over trapped gullies.

If the Sanitary Committee had chosen, they could have enforced compliance with this Act at once, without issuing notices on property owners; but as it affected nearly every house in the town, more or less, it was felt that it would be a hardship on property owners to do this, and they therefore decided to serve notices, and by this means the work was done gradually.

In the year 1900, the Public Health Acts Amendment Act was passed, in which power was given to Local Authorities to make Bye-laws to enforce the provision of a proper water supply to all closets. By this time, however, the whole of the work in Brighton had been done.

Another great sanitary improvement has been the abolition of underground manure pits, and the substitution of movable galvanised iron cages.



Before this step was taken, numerous complaints were received at the Sanitary Office of nuisances caused by the fermentation of the manure in the underground pits, and when the manure was being removed from these the smell was most offensive. When the manure is placed in a cage, the fresh air passes through it and prevents fermentation, so that there is very little smell from it.

### House Refuse.

The old-fashioned brick ashpits were very offensive and difficult to cleanse. A very large number of these have been removed and replaced by movable galvanised iron dustbins, and I hope that the time is near when every house will be supplied with a movable iron dustbin.

For many years the whole of the house refuse collected in the town was carted to the Corporation ash yard in Hollingdean Road and sifted. The ashes were sold for brickmaking, and the soft core, consisting of paper, vegetable matter, &c., was given to farmers for manure.

This arrangement was most unsatisfactory, as the demand for ashes was intermittent, and consequently there was at times an immense accumulation in the ash yard, and as particles of animal and vegetable matter were mixed up with the ashes, the heap fermented, and most offensive smells arose from it, which could be noticed a considerable distance away from the yard. In addition to this, swarms of rats and flies assembled on the ash-heap, from which they passed on and invaded the surrounding houses, carrying with them the germs of infection from the heap.

As the town increased in size, it became more difficult to dispose of the ashes and soft core, partly owing to the quantity collected being greater, and partly owing to the demand for them being less. In addition to this, building operations were being rapidly pushed forward in the vicinity of the ash yard, and serious complaints were received of the nuisance from the ash-heap.

In view of these facts, the Town Council decided to erect a Refuse Destructor, and as the establishment of a Public Abattoir was decided upon about the same time, it was found necessary to increase the size of the yard.

A piece of land on the north side of the yard was therefore added to it, the road was diverted, the ground levelled, and the present yard formed.

After careful inquiry into the merits of the various kinds of refuse destructor in use at other towns, the Council decided to use Manlove Alliott's apparatus, and one containing twelve cells was erected, at a cost of £18,832. This destructor has the advantage of being simple and clean in working. The refuse is collected and conveyed to Hollingdean yard in covered vans. These vans are drawn on to a platform, and their contents are tipped into a carrying waggon running on iron rails over the furnaces. Each of these waggons has four compartments, and each compartment holds the requisite amount of material for charging up one furnace.

The clinker is broken up by movable fire bars in the furnace, which are worked by a lever at the side of the furnace. When the refuse in the

furnace has been thoroughly burned, the clinker is withdrawn into an iron wheelbarrow and wheeled into the yard, where it is quenched with water. The furnace is then re-charged with fresh refuse from the waggon overhead. This is done by turning a winch which works a chain and draws the waggon along the rails over the furnace. As soon as the division in the waggon which contains the charge reaches the required position immediately over the furnace, a door in the bottom opens automatically, and the refuse falls into the fire. The winch is then turned in the opposite direction, and this withdraws the waggon, and as it returns the door underneath is automatically closed. The average amount of refuse burned every 24 hours is 95 tons.

### **Public Abattoir.**

The Public Abattoir owned by the Corporation was built in 1894, at a cost of £10,545. Later, an additional private pig slaughter-house and hanging room was built, at a cost of £601.

The buildings consist of a public slaughter-house for bullocks, calves, sheep and lambs, with three lairs for the animals before slaughter, and three hanging rooms for the meat; three private slaughter-houses, each having its own lair and hanging room; one public pig slaughter-house, with pigstyes and hanging room; one private pig slaughter-house, with pigstyes and hanging room; two feeding lairs; hide and skin shed; and fodder loft.

The offices consist of the Superintendent's office, Master Butchers' office, and men's mess room.

The avenue between each slaughter-house and hanging room is covered by a glass roof. The floors are paved with granolith, and the buildings are lighted by electricity. The yard is paved with tar macadam.

The cattle are brought to a railway siding adjoining the cattle dock, where they are unloaded and placed in the lairs, thus avoiding the necessity of their being driven through the streets.

The carcases are dressed on travelling gear, and when finished are carried by the gear across the covered avenue to the hanging room. The gear is easily worked, and not only saves a large amount of heavy labour, but avoids the necessity of lifting or handling the meat after it is dressed; this is a great advantage, especially in hot weather.

During the thirteen years, ending December, 1907, 203,513 animals have been slaughtered at the Public Abattoir.

The whole of the meat slaughtered at the Abattoir is carefully inspected, before being taken away, and none that is unwholesome is allowed to be taken away.

### **Water Supply.**

Respecting the water supply to Brighton, the first Act for supplying the town of Brighton with water was dated June 16th, 1834, and the undertaking was in the hands of a company. The well from which the



water was obtained was at the north end of Lewes Road. This well, however, has been abandoned for some years.

The water was at first pumped direct into the mains, but as the engines were frequently damaged by the water being suddenly turned off, a reservoir was made to supply the mains by gravitation. The capacity of this reservoir was 2,000,000 gallons. By this means the central and eastern districts were afforded a supply, but the western portion of the town could not be supplied from this source, which therefore continued to rely upon the private wells.

In 1849, there were 10,145 houses and 785 stables and workshops in Brighton; 3,800 of the houses were supplied with water from the company's mains. The average amount pumped per day was 700,000 gallons. The supply was intermittent, and cisterns were supplied for storage.

Some years later, a second company was formed, which bought up the shares of the old company, and commenced the works at Goldstone.

The undertaking was afterwards purchased by the Corporation of Brighton, who have since then extended the headings at Goldstone, established works at Falmer, Patcham and Mile Oak, and have purchased the works at Shoreham, so that they have now complete control of the water-producing area near the town, and are able to supply the neighbouring towns and villages with water at a profit to themselves.

The supply is practically inexhaustible, and is of unimpeachable purity. To make sure of this, samples of water from each of the wells are analysed once a month, bacteriologically and chemically at the Municipal Laboratory.

The capacity of the various reservoirs at the present time is over 12,000,000 gallons. The average amount pumped per day is 6,000,000 gallons. The amount used for street watering is 59,052,300 gallons per annum, and for flushing the sewers is 13,577,475 gallons per annum.

Since the Waterworks have been owned by the Corporation, the intermittent service has been entirely abolished, and the supply has for some years been constant. Practically all drinking water cisterns have been removed, through the action of the sanitary department, and the draw-off taps fixed on the main, so that there is now no risk of contamination of the water after its delivery into the house. This is a great sanitary improvement, as many of the old cisterns were fixed in most undesirable places.

There is no restriction in the use of water providing there is no waste. The average amount used per head per day in Brighton is 35 gallons, compared with 20 gallons per head in many other towns.

### Open Spaces.

Passing to the subject of open spaces, Brighton is exceptionally fortunate in possessing a large number of these, nearly the whole of which are now the property of the Corporation. These open spaces are of priceless value to the town as a health resort, and may well be termed the "Lungs of the Town." They are all planted with trees and shrubs, and the lawns are artistically laid out with flower beds. Seats are provided





In Preston Park, Brighton.

along the walks, and in the spring and summer these are much patronised by visitors, especially those who require rest and quiet.



Lovers' Walk, Preston Park.

The open spaces are situated in various parts of the town, perhaps the most beautiful of which are the Victoria Gardens, Pavilion Grounds,



Old Steyne, Brighton.



and the Old Steine; in fact, one may walk down the whole length of the valley, from Lewes Road or Ditchling Road, to the sea front through an avenue of trees in these gardens.



In Queen's Park.

In addition to this, Brighton possesses four parks, viz.: Preston Park containing 67 acres; Hollingbury Park, containing 180 acres; Queen's Park, containing 11 acres; and also the Blaker Recreation Ground. These parks are tastefully laid out with trees and flower beds, and are



In Queen's Park.

open to the public. Certain portions are laid out for golf, cricket, football, polo, tennis, bowls, &c., and the remainder are used by the public at their pleasure.



## Work undertaken for the Housing of the Working Classes.

(1) Twenty years ago attention was called, by an outbreak of Typhoid Fever, to an area, bounded on the north by Edward Street, on the south by St. James' Street, on the east by Upper Rock Gardens, and on the west by Devonshire Place. Twenty cases of Typhoid Fever occurred in Little St. James' Street. This called attention to the insanitary state of the dwellings in that area. The ground plan of the area allows one to judge of the crowded condition of the houses, and the impossibility of the free circulation of air in the various courts. Little St. James' Street, for instance, was only 9 feet wide, and the entrance to the space in front of Paradise Cottages was only 8 feet wide. One can also see that a large part of the area was occupied by stables. The Council proceeded to clear this area, under the slow, difficult and expensive provisions of Part I. of the Housing of the Working Classes Act of 1890.

(2) In May, 1890, a representation was made to the Council, shewing that in an area bounded on the north by Carlton Hill, on the south by Edward Street, on the east by Grosvenor Street, and on the west by Mighell Street, the death-rate for the two years 1888 and 1889 was 36·8 compared with 15·5 for all Brighton; the death-rate from tuberculous disease was 9·3 compared with 2·2 for Brighton; the infantile mortality was 221 compared with 140 for the whole town. It was also stated that the houses in this area were commonly overcrowded, and that they were badly arranged, old and dilapidated. This representation led to the clearing of this area and its replacement by White Street and Blaker Street.

(3) The last large scheme undertaken was that of the Spa Street area, regarding which a representation was made in March, 1898. This area was bounded on the north by Park Hill, on the south by Edward Street, on the east by Park Street, and on the west by Leicester Street. Similar conditions prevailed there to those existent in the areas dealt with previously. This site is at present occupied by Tillstone Street.

In the first two schemes, after the buildings had been demolished, the land was sold in building plots, subject to the condition that houses must be erected in accordance with plans prepared by the Borough Surveyor. In the last scheme the Corporation have themselves built houses on part of the land, and it was proposed to continue this work during this winter.

In connection with the Cumberland Place Scheme, the Ewart Street site was bought and sold in building plots, under the same condition as that explained above. Under Part III. of the Housing of the Working Classes Act, the Corporation built, in 1899, 28 houses on the Elm Grove site, and, in 1901, 30 houses in Dewe Road, on lands presented them by Mr. Alderman Abbey and the late Mr. Daniel Friend, and by Sir John Blaker respectively.



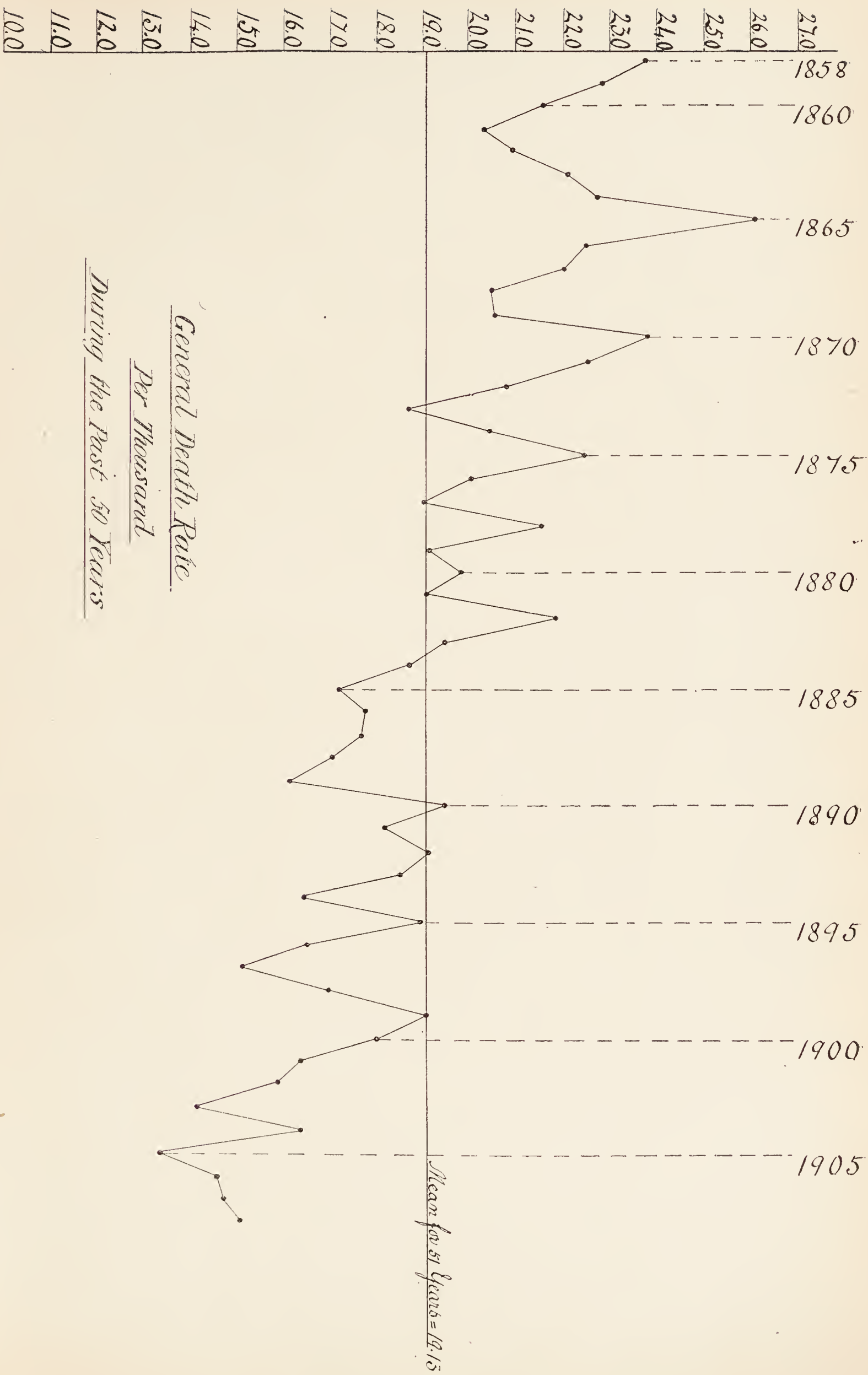
The following is a brief summary of the cost, &c., of these schemes, taken from the Annual Report of the Medical Officer of Health for 1902, page 82.

	Total Gross Cost.	Amount received for re-sale of land and materials and for rent.	Nett Cost.
Little St. James' Street Area	£17,388	£5,005	£12,388
Cumberland Place Area ...	49,992	16,038	33,964
Ewart Street site in connection with Cumberland Place Area ...	4,000	4,000	Nil.
Spa Street Area ...	30,699	?	?
	102,079	25,043	

	Little St. James' Street Area.	Cumberland Place Area.	Spa Street Area.
No. of persons displaced ...	329	1,104	725
No. of persons re-housed ...	150	1,113	725
Area in square yards ...	7,223	14,927	8,110
Date the scheme was passed by Council ...	26/9/1889	30/10/1890	30/10/1898
Approximate nett cost of scheme ...	£12,383	£33,954	cannot be stated.
Cost per person displaced ...	£37 13s. 9d.	£30 15s. 0d.	do.
Cost per square yard of area	£1 14s. 3d.	£2 5s. 6d.	do.

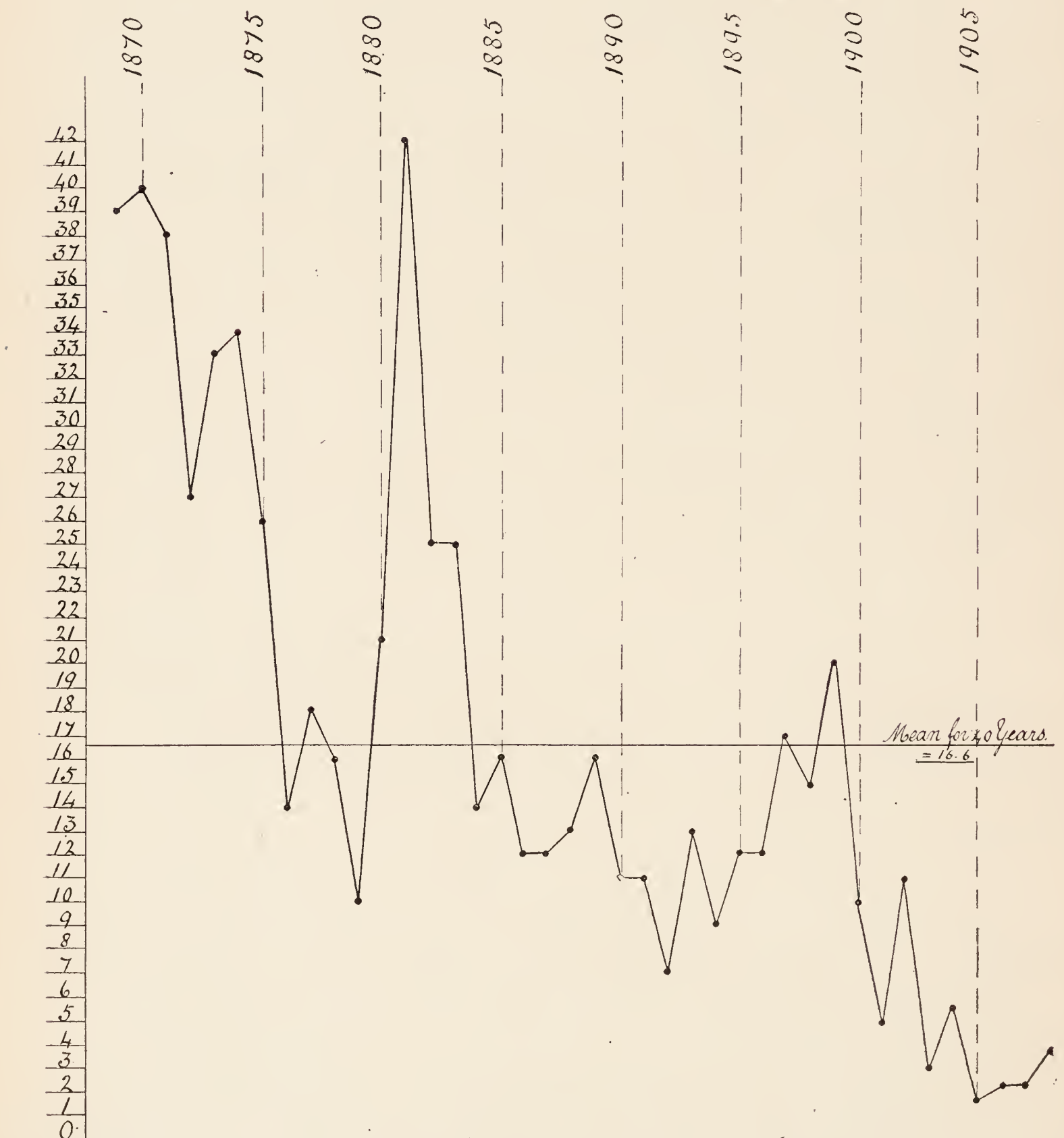
Having described the various improvements in the general sanitary condition of Brighton, one naturally turns to the vital statistics of the town in order to find out what gain there has been in the health of its inhabitants.

The following diagram shews the Brighton death-rate for the last 50 years. It has fallen from 23·8 in 1858 to 14·7 per 1,000 in 1907. During the same period, the death-rate of England and Wales has fallen from 21·8 to 15·0.





Taking the Typhoid death-rate next, one finds a very satisfactory decrease, the death-rate of 2·3 in 1907, being only one-sixteenth of what it was in 1869. You will observe that the fall is steady, with, however, an exceptional rise in 1881. Dr. Taaffe, who was then Medical Officer of Health, in an interesting report, shews that the cause of the epidemic was milk diluted with contaminated water.



*Death Rate from Enteric Fever*  
*Per 100,000*  
*During the Past 40 Years*

I would call attention to the low rates in the last eight years, which, doubtless, in large measure is due to the Council, in August, 1899, having caused public notices to be published throughout the Borough, containing the following warning:—

COUNTY BOROUGH OF BRIGHTON.

*The public are warned against eating oysters, mussels and cockles derived from sewage-polluted sources. Serious illness is frequently caused by neglect of this precaution.*

(Signed) ARTHUR NEWSHOLME,  
Medical Officer of Health.

With reference to the death-rate from diseases of the chest, one finds that now it is roughly one-third of what it was 50 years ago. The diminution is due in great part to the better housing and feeding of the people. By housing, I do not include only an increase in the size of the rooms, although that is important. I refer also to improvements in the ventilation, lighting, and the prevention of dampness. In recent years, for instance, hundreds of rooms, of which only the lower half of the window would open, have now had the upper sash also made to open. The importance of fresh air is more and more being borne in upon the public. This is especially important with regard to bedrooms, and I have no doubt that if any records had been kept, it would be found that for one person who slept with the window open at night 20 years ago, 50 do it now. The better lighting of the rooms and passages has led to much greater cleanliness. The insertion of damp courses in our new houses, and the introduction of proper floor ventilation in the old houses, along with the proper paving of yards, have provided the people with drier and consequently warmer houses. The cleaner and drier houses re-act on bronchitis and lung trouble, and appreciably lessen this death-rate.

Certain other causes of death the Health Authority does not influence much. Disease of the alimentary tract, heart disease, cancer, influenza, whooping cough and measles are not influenced to any extent, and naturally there is an actual increase in the number dying from the decay of old age. We have, however, done a great deal to lessen the death-rate from such diseases as scarlet fever and diphtheria.

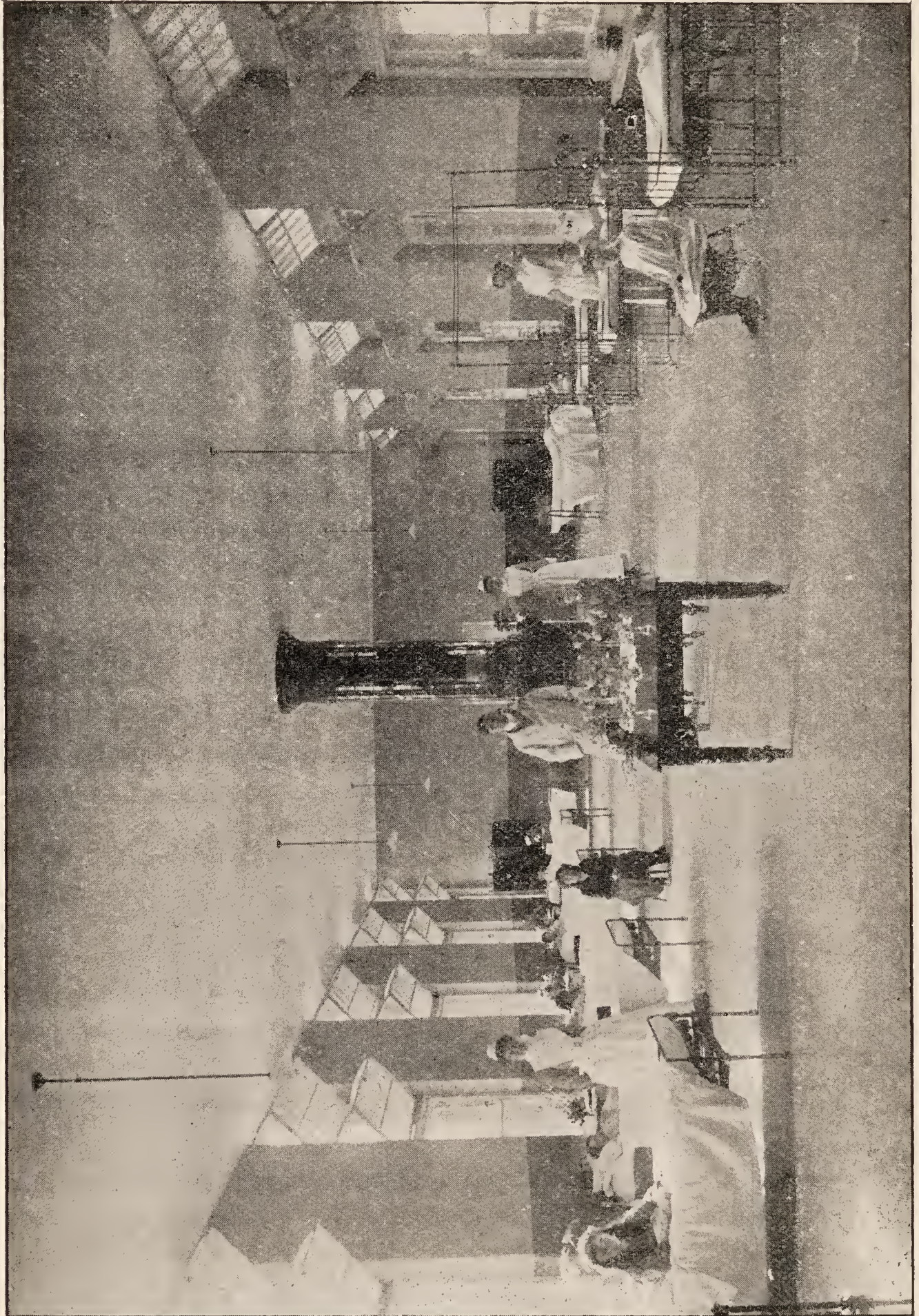
From the Reminiscences of Mr. Nathaniel Paine Blaker, one learns that after his appointment as House Surgeon to the Brighton and Hove Dispensary in 1860, there was an epidemic of Scarlet Fever, during which he signed twenty-three certificates of death from Scarlet Fever in one month. During the last five years—from 1903-1907 inclusive—there were only five deaths from Scarlet Fever altogether.

This leads me to speak of the Borough Sanatorium. I take a great personal interest in this Institution, and I am proud to say that it is one of the finest and most up-to-date fever hospitals in Great Britain.

The land on which it stands is 10 acres in extent, 326 feet above the mean sea level, with an exposure to the west and south. Altogether, this site has cost the Corporation £6,000. The old Sanatorium, erected in 1881, has gradually been replaced by the present modern buildings. These were



built in the following order:—A Steam Laundry was erected in 1890 at a cost of £1,843. From 1896-1898, the Administrative Building, two single-storied buildings (now used for Diphtheria patients and special cases requiring isolation), a discharge block, the Porter's Lodge, and a new Disinfecting Station were built. The accepted tender for this work was



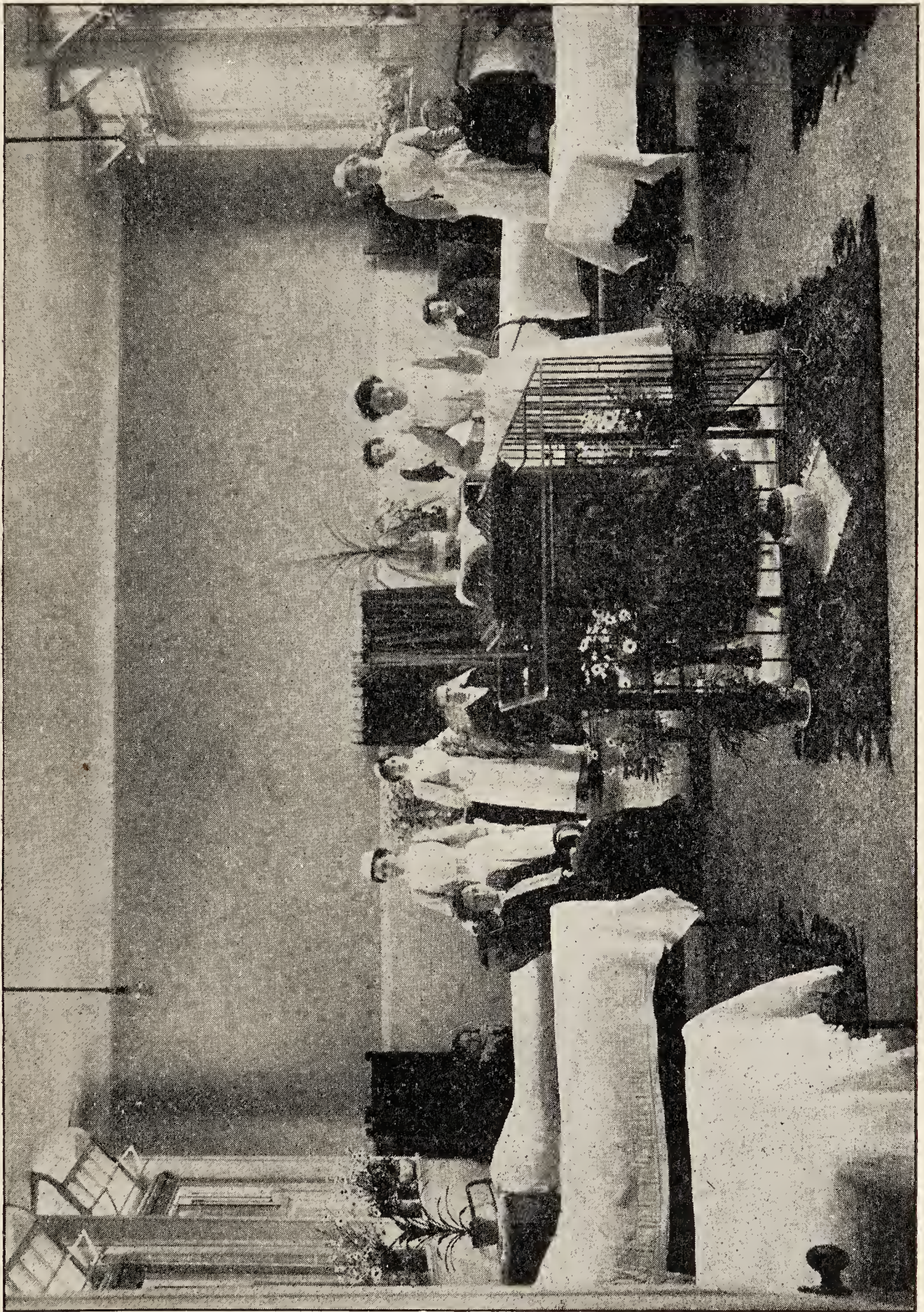
The Sanatorium.—One of the Ground Floor Wards.

for £19,775. Later—from 1902-1905—two two-storied pavilions were built, one of these (the present Scarlet Fever ward) on the south-east of the administration building, and the other on the north-east, the ground floor of which is now used for Phthisis patients. The total cost of these two pavilions was £27,840. In 1905, a large shelter was erected for the



male consumptives at a cost of £164, and recently, a small revolving shelter, used by the female patients, was presented by Mr. Soper.

Before the granting of the loan for the work carried out during 1896-7-8, the Local Government Board made the Council promise that



The Sanatorium.—One of the First Floor Wards.

provision would be made for the treatment of Small-pox in a new building, which should not be so placed as to have, within a quarter of a mile, a hospital, a workhouse, or any similar establishment, or a population of 150 to 200 persons; or, within half a mile, a population of 500 to 600 persons, whether in one or more institutions or in dwelling houses.



These stringent conditions naturally led us far afield before a suitable place could be found. Finally, Fulking Grange premises, situated on the Downs immediately to the south of the Village of Fulking, were purchased in 1902—the house, a barn, and 11 acres of land, costing £2,012. The cost of alterations and subsequent repairs have been £1,903. The net result, then, of an expenditure of, roughly, £64,000, is the provision of 160 beds at the Sanatorium and 14 beds at Fulking Grange.

Since 1881, 11,635 patients have been treated at the Sanatorium, and 85·6 per cent. of the total number of notified cases of Scarlet Fever were removed to hospital during last year. These two figures prove, respectively, the immense number of cases treated at this Institution and its popularity.

The work which has created, perhaps, the greatest amount of interest in recent years is the treatment of consumptive patients at the Sanatorium. Work undertaken to lessen the spread of Consumption was first commenced in 1893, when visits were paid to each house in which a death from this disease had occurred, in order that a history of the illness might be taken and disinfection carried out. Later, in January, 1899, a scheme for the Voluntary Notification of Phthisis was put into operation, Brighton being the first town in which phthisis cases were notified. At first, attention was paid to the education of patients in their own homes; they were taught to observe simple rules to prevent the spread of infection, and cards of instruction were left. The admission of patients into the Sanatorium has done a great deal to encourage practitioners to notify their cases.

The admission of these patients was begun in May, 1902. Up to the end of last year, 730 patients had been treated. At the present time there is an average of some 20 Phthisis patients being continuously treated all the year round. At first, the idea followed was to treat early cases for short periods of about one month. During that time, the patients were educated to appreciate the benefit of fresh air, and also to take proper precautions regarding their sputum. Naturally, at first, a considerable accumulation of patients had to be got through, but now, in the absence of so great a number of fresh early cases, more advanced cases are being admitted and are treated for longer periods. In this connection, one must not forget the useful work of segregation of consumptive patients which the Brighton and Steyning Guardians carry out. The half-starved pauper is just the person to be readily infected by phthisis, and, therefore, it was a happy idea to isolate the consumptives in these workhouses. At present, in the Brighton Workhouse, a male ward with 30 beds, and female wards for 6 patients, are reserved for consumptives, but I hear that even this is, at times, insufficient for the number of cases amongst the inmates.

The treatment of consumptive patients has had most beneficial results. It has been proved beyond doubt that many patients have lived several years longer than they would have done had they not received the Sanatorium treatment.

In conclusion, I feel sure that you will realise that the health of Brighton is safeguarded in the most thorough fashion by the Sanitary Committee and its officers. No greater proof of the health-giving properties of Brighton could be furnished than the fact that His Most Gracious Majesty the King has honoured us with two visits during the past twelve months. His Majesty is still in our midst, and as loyal subjects we are glad to know that he is being steadily restored to health.